

408.8

AI
FM

31-11
U.S. ARMY
U.S. NAVY
U.S. MARINE CORPS

S/S Aug 67

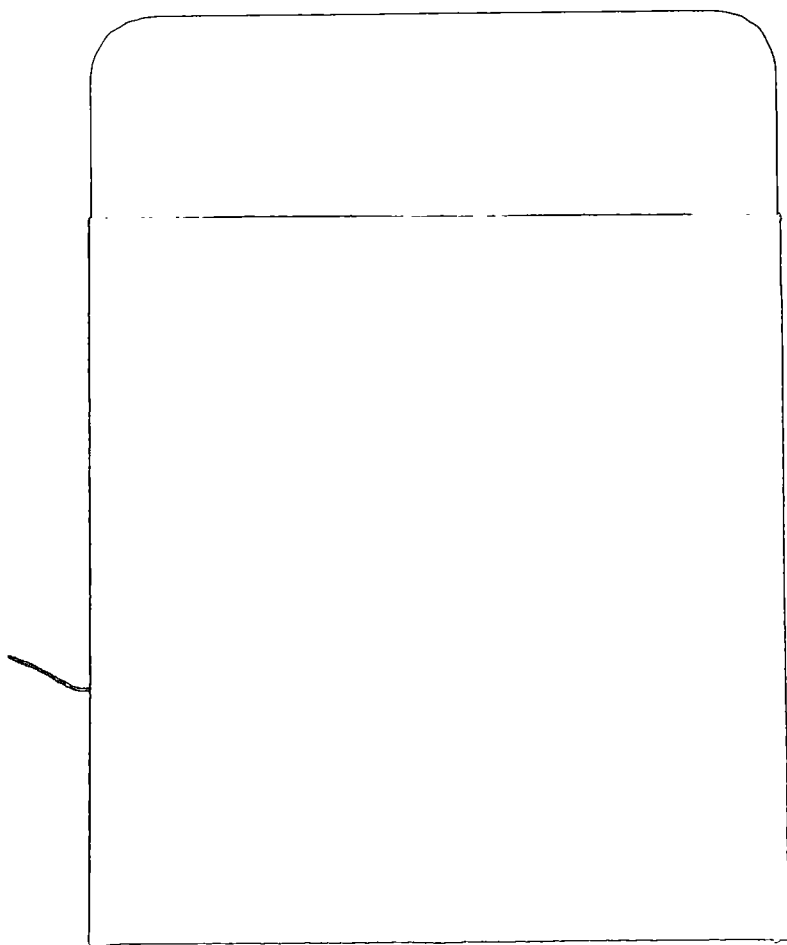
Reference
souerejy

FM 31-11
NWP 22(A)
LFM 01

Reference

DOCTRINE FOR AMPHIBIOUS OPERATIONS

DEPARTMENTS OF THE ARMY AND THE NAVY
JULY 1962



**U.S. ARMY
U.S. NAVY
U.S. MARINE CORPS**

**FM 31-11
NWP 22(A)
LFM 01**

DOCTRINE FOR AMPHIBIOUS OPERATIONS

**DEPARTMENTS OF THE ARMY AND THE NAVY
JULY 1962**

**ORIGINAL
(REVERSE BLANK)**

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF STAFF
DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
and
THE COMMANDANT OF THE MARINE CORPS

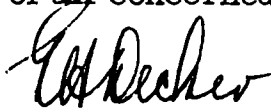
FM 31-11
NWP 22(A)
LFM 01

ARMY FIELD MANUAL 31-11
NAVAL WARFARE PUBLICATION 22(A)
MARINE CORPS LANDING FORCE MANUAL 01

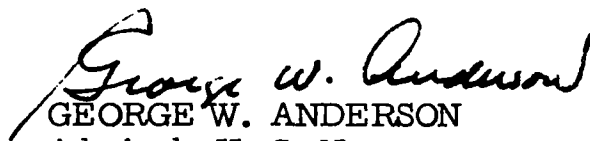
DOCTRINE FOR AMPHIBIOUS OPERATIONS

FOREWORD

This document sets forth basic joint amphibious doctrine for the Army, Navy, and Marine Corps. It is published for the guidance of all concerned.



G. H. DECKER
General, United States Army
Chief of Staff



GEORGE W. ANDERSON
Admiral, U. S. Navy
Chief of Naval Operations



DAVID M. SHOUP
General, U. S. Marine Corps
Commandant of the Marine Corps





DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
and
HEADQUARTERS, UNITED STATES MARINE CORPS

1 July 1962

LETTER OF PROMULGATION

1. NWP 22(A), DOCTRINE FOR AMPHIBIOUS OPERATIONS (U), is an Unclassified Nonregistered publication. Administrative procedures concerning the handling of this publication by the holders are contained in the effective edition of NWP 0, Guide and Master Index to the NWP's.
2. NWP 22(A) is EFFECTIVE upon receipt. It supersedes NWP 22, AMPHIBIOUS OPERATIONS (U), which is to be destroyed by burning without report.
3. Within the Marine Corps Publication System, this publication is assigned the short title LFM-01, an Unclassified Nonregistered publication to be effective upon receipt.
4. The FORWARD to this publication sets forth its source and status.
5. There is no objection to making extracts from these publications.

C. A. Youngdale
C. A. YOUNGDALE
Brigadier General, USMC
Assistant Chief of Staff, G-3

L. P. Ramage
L. P. RAMAGE
Rear Admiral, USN
Assistant Chief of Naval Operations
(Fleet Operations and Readiness)



LIST OF EFFECTIVE PAGES

Subject Matter	Page Number	Effective Pages
TITLE PAGE	I (REVERSE BLANK)	ORIGINAL
FORWARD	III (REVERSE BLANK)	ORIGINAL
U.S. NAVY AND MARINE CORPS LETTER OF PROMULGATION	V (REVERSE BLANK)	ORIGINAL
LIST OF EFFECTIVE PAGES	VII, VIII	ORIGINAL
RECORD OF CHANGES AND CORRECTIONS	IX (REVERSE BLANK)	ORIGINAL
VOLUME CONTENTS	XI (REVERSE BLANK)	ORIGINAL
INTRODUCTION	XIII (REVERSE BLANK)	ORIGINAL
PART I CONTENTS	XV (REVERSE BLANK)	ORIGINAL
CHAPTER 1	1-1 through 1-5 (REVERSE BLANK)	ORIGINAL
CHAPTER 2	2-1 through 2-9 (REVERSE BLANK)	ORIGINAL
PART II CONTENTS	XVII (REVERSE BLANK)	ORIGINAL
CHAPTER 3	3-1 through 3-5 (REVERSE BLANK)	ORIGINAL
CHAPTER 4	4-1 through 4-8	ORIGINAL
CHAPTER 5	5-1 through 5-3 (REVERSE BLANK)	ORIGINAL
CHAPTER 6	6-1 through 6-5 (REVERSE BLANK)	ORIGINAL
CHAPTER 7	7-1 through 7-11 (REVERSE BLANK)	ORIGINAL
CHAPTER 8	8-1 through 8-7 (REVERSE BLANK)	ORIGINAL
CHAPTER 9	9-1 through 9-7 (REVERSE BLANK)	ORIGINAL
CHAPTER 10	10-1 through 10-10	ORIGINAL
CHAPTER 11	11-1 through 11-6	ORIGINAL
PART III CONTENTS	XIX (REVERSE BLANK)	ORIGINAL
CHAPTER 12	12-1 through 12-9 (REVERSE BLANK)	ORIGINAL
CHAPTER 13	13-1 through 13-4	ORIGINAL
CHAPTER 14	14-1 through 14-12	ORIGINAL
CHAPTER 15	15-1 through 15-7 (REVERSE BLANK)	ORIGINAL
CHAPTER 16	16-1 through 16-19 (REVERSE BLANK)	ORIGINAL
PART IV CONTENTS	XXI (REVERSE BLANK)	ORIGINAL
CHAPTER 17	17-1 through 17-4	ORIGINAL

LIST OF EFFECTIVE PAGES (Cont.)

Subject Matter	Page Number	Effective Pages
CHAPTER 18	18-1 through 18-4	ORIGINAL
CHAPTER 19	19-1 through 19-4	ORIGINAL
PART V CONTENTS	XXIII (REVERSE BLANK)	ORIGINAL
CHAPTER 20	20-1 through 20-4	ORIGINAL
CHAPTER 21	21-1 through 21-3 (REVERSE BLANK)	ORIGINAL
ANNEX A	A-1 through A-15 (REVERSE BLANK)	ORIGINAL
ARMY AUTHENTICATION	XXV (REVERSE BLANK)	ORIGINAL
INDEX	INDEX 1 through 8	ORIGINAL



VOLUME CONTENTS

INTRODUCTION

PART I BASIC CONCEPTS AND ORGANIZATION

Chapter

- 1 The Concept of Amphibious Operations**
- 2 Organization and Command**

PART II AMPHIBIOUS PLANNING

Chapter

- 3 The Approach to Planning**
- 4 Basic Decisions**
- 5 Subsidiary Landings**
- 6 Intelligence Planning**
- 7 Supporting Arms Planning**
- 8 Nuclear Weapons Planning**
- 9 Communications Planning**
- 10 Logistic Planning**
- 11 Ship-to-Shore Movement Planning**

PART III EXECUTION OF THE AMPHIBIOUS OPERATION

Chapter

- 12 Embarkation**
- 13 Rehearsals**
- 14 Movement to the Objective Area**
- 15 Preassault Operations**
- 16 The Assault**

PART IV LESSER INCLUDED OPERATIONS

Chapter

- 17 Amphibious Withdrawals**
- 18 Amphibious Demonstrations**
- 19 Amphibious Raids**

PART V OPERATIONS UNDER UNUSUAL CONDITIONS

Chapter

- 20 Landings in Low Visibility**
- 21 Cold Weather Operations**

ANNEX A GLOSSARY OF TERMS AND DEFINITIONS

INDEX

ORIGINAL

INTRODUCTION

CONTENTS

- 001 Purpose
- 002 Basis
- 003 Scope
- 004 Command and Organization
- 005 Relationships with Other Commands
- 006 Changes

001 PURPOSE

The purpose of this publication is to set forth the basic doctrine governing the planning for and conduct of all amphibious operations.

002 BASIS

This publication has been developed by the Navy and the Marine Corps in accordance with the statutory responsibilities for amphibious warfare assigned to those Services by the National Security Act of 1947 (Amended). The Functions Paper and Unified Action Armed Forces (UNAAF), interpreted within the framework of the above Act, provide amplification concerning the responsibilities of all Services for amphibious warfare.

003 SCOPE

The doctrine set forth herein applies only to the amphibious operation, from the inception of planning to the termination of the operation, in terms designed to be suitable for the guidance of all forces engaged in amphibious operations without respect to the size, source, or composition of those forces. The term amphibious operation is therefore used in this publication in its generic sense to encompass all such operations in which U.S. forces participate. Since the tasks to be performed in any amphibious operation are functionally the same, this doctrine is applicable to all amphibious operations to include those of a joint and combined nature. It does not include doctrine for base development, base defense, or the initiation of subsequent operations, although these, as pertinent, require consideration in the amphibious planning process.

004 COMMAND AND ORGANIZATION

a. Forces assigned to conduct an amphibious operation are organized as an amphibious task force or, when the UNAAF criteria for a joint task force are met, a joint amphibious task force. (For simplicity, only the term amphibious task force is used in the text of this publication.)

Other forces may be attached to or directed to provide support to the task force in accordance with the provisions of UNAAF.

b. The composition of the staff of the amphibious task force commander will reflect the organizational form of his assigned forces, with appropriate consideration of other forces which may be attached or directed to provide support.

c. Type unit designations used in the text of this publication are interchangeable with and applicable to U.S. and Allied units of comparable size and nature.

005 RELATIONSHIPS WITH OTHER COMMANDS

a. The amphibious task force is organized as a subordinate command within the area command structure. Establishment of an intervening command between the amphibious task force and the area command may be required when the amphibious operation is one of several related operations and the area command structure is not suitable for direct control of all forces participating therein. However, irrespective of the command relationships above the level of the amphibious task force, the amphibious task force commander retains responsibility for, and control of, forces assigned to the amphibious task force.

b. Relationships of the amphibious task force commander with other commands will be the subject of specific instructions for each operation in accordance with general principles set forth in UNAAF. In the case of a combined command, similar instructions will be required.

006 CHANGES

Users of this publication are requested to submit comments and recommendations for changes to the Chief of Naval Operations or the Commandant of the Marine Corps, as appropriate. It is the coordinate responsibility of those Chiefs of Service to process such recommendations in accordance with the procedures in UNAAF.



PART I

BASIC CONCEPTS AND ORGANIZATION

Chapter

- 1 The Concept of Amphibious Operations**
- 2 Organization and Command**



INDEX

A

- Administrative control, organization and command, 278
- Administrative, task groups, 224a(14)
- Advance force, 1530b
- Advanced force, 240
- Advanced force, protection of, 1537
- Air force forces, 226
- Air operations control, supporting arms, 735
- Air support, landing in low visibility, 2020a(9)
- Air support, supporting arms, 730, 731
- Air, tactical control, task groups, 224a(3)
- Air, tactical shore-based, task groups, 224a(5)
- Air transport, task groups, 224a(13)
- Alternate, amphibious planning, 327
- Amphibious demonstrations:
 - definition, 1800
 - execution, 1840
 - objective area, 1810
 - outside the objective area, 1820
 - planning, 1830
- Amphibious operations, concept of:
 - assault, 112
 - characteristics and definition, 101
 - embarkation, 109
 - general, 100
 - movement, 111
 - operational types, 104
 - planning, 108
 - purpose, 102
 - rehearsal, 110
 - relative strength requirements, 106
 - scope, 103
 - sequence, 107
 - supporting operations, 105
 - termination of, 113
- Amphibious planning:
 - alternate, 327
 - basic considerations, 301
 - commanders, early designation of, 322
 - concurrent, 310
 - data, dissemination of, 324
 - detailed, 321
 - drafts, distribution of, 334
 - information, collection of, 323
 - intelligence, dissemination of, 323
 - parallel chains of command, 320
- Amphibious planning—continued
 - procedures, 330
 - directive, 331
 - memoranda, 333
 - program, 332
 - scope, 300
 - security, 325
 - staffs, early assembly of, 322
 - time factor, 326
 - weapons, 328
 - biological, 328
 - chemical, 328
 - nuclear, 328
- Amphibious raids:
 - command relationships, 1920
 - definition, 1900
 - planning, 1930
 - rehearsals, 1940
- Amphibious task force, 223
- Amphibious withdrawals:
 - characteristics, 1740
 - command relationships, 1730
 - definition, 1700
 - embarkation procedures, 1770
 - execution, 1750
 - purpose, 1710
 - scope, 1720
 - supporting arms, 1760
- Antimechanized defense, 754
- Approach schedule, 1141a(3)
- Approach to the objective area, 1460
- Assault:
 - assault phase, scope of, 1601
 - assault control, 1620
 - helicopter-borne, 1622
 - waterborne, 1621, Fig. 16-1
 - assault organization, 1610
 - area, 1613
 - landing force, 1611
 - naval forces, 1612
 - attack, continuation of, 1660
 - beachhead, capture of, 1650
 - combat support units, 1651
 - landing of reserves, 1652
 - cold weather, 2100
 - communications, 1680
 - final prelanding preparation, 1630
 - landing area, 1631
 - ship-to-shore movement, 1632

Assault—continued

- initiation of assault, 1641
- logistics, 1670
 - follow-up shipping, 1671
- ship-to-shore movement, 1642
- supporting arms, 1643
 - air defense, 1643(a)(1)(b)
 - air support, close, 1643(a), 1643(a)(1)(a)
 - air support, miscellaneous, 1643(a)(1)(c)
 - control, 1643e, 1643(a)(1)(d)
 - daily planning, 1643d, 1643(a)(1)(d)
 - naval gunfire, 1643, 1643(a)(2)
- termination of, 1691

Assault area diagram, 1141a(4)

Assault, concept of, 112

Assault schedule, 1142a(3)

Assault task force organization, 1210a(1)

Attack and parallel landing groups, 230

Attack group commander, 1113

B

Beachhead, assault capture of, 1650

Beachheads and landing areas, 420-423, Fig. 4-1

Base development planning, 1090

Basic considerations, amphibious planning, 301

Basic decisions:

- airborne and air-transported, drop zones for, 460

- aircraft, fixed wing, landing zones, 460

- beachheads and landing areas,

- determination of, 420

- beachheads, determination of, 422

- decision, 420c(2)

- landing areas, selection of, 423

- landing sites, designation of, 421

- primary and alternate landing areas, 420c(1)

- selection of landing areas, 423b, Fig. 4-1

- drop zones for airborne and air-transported operations, 460

- factors in formulation of concept of operations ashore, 430, Fig. 4-2

- helicopter landing zones, selection of, 450

- introduction, 400

- landing areas and beachheads,

- determination of, 420

- landing beaches, selection of, 440

- landing, tentative date and hours of, 470

- landing zones for fixed-wing aircraft, 460

- objectives, determination of, 410

- operations ashore, landing force concept of, 430

- planning, detailed, 480

- principal factors in the selection of the

- tentative date and hour for landing,

- 470b, Fig. 4-3

- tentative date and hours of landing, 470

Biological weapons, 328

C

Capture of specific positions, 510

Carrier, support, task groups, 224a(6)

Characteristics, concept of, 101

Chemical, weapons, 328

Close covering, task groups, 224a(11)

Cold weather operations:

- characteristics, 2100

Command, delegation of, 279

Command during operations, 270

Command, parallel chains of, 213, 320

Command relationships, amphibious raids, 1920

Command relationships in amphibious

- withdrawals, 1730

Commander, advanced force, 1532a(3)

Commander, amphibious task force, 1532a(2)

Commander, attack group, 1113

Commander, intelligence planning, 601

Commander, landing force, 1112, 1532a(1)

Commander, landing group, 1113, 1532a(4)

Commander, team embarkation responsibilities of, 1265

Commanders, consultation between, 273, 274, 276

Commanders, designation of, 250

Commanders, early designation of, 322

Commanders, individual ship, embarkation responsibilities, 1261a(4)

Commanders of other nation(s) forces, 1114

Commanders, reporting of, 271

Communications, assault, 1680

Communications, objective area, 1455

Communications planning:

- communications, base development and garrison, 916

- communications deception and countermeasures and protection against enemy countermeasures, 930

- during the assault phase, 915

- during the embarkation phase, 912

- during the movement to the objective phase, 914

- during the planning phase, 911

- during the rehearsal phase, 913

- communications plan, the, 940

- communications planning considerations, general, 910, Fig. 9-1

- scope and requirements of communication planning, 900

- communications responsibilities, 920

- amphibious task force commanders

- responsibilities, 920c

- commanders of other forces

- responsibilities, 920c

- landing force commanders

- responsibilities, 920b

Communications, planning, 910, Fig. 9-1
Concurrent, amphibious planning, 310
Control, task groups, 224a(2)
Coordination, supporting arms, 720, 722, Fig. 7-1
Counterintelligence, 650
Cover, subsidiary landings, 512

D

D-day groups, objective area, 1412
Data, dissemination of, 324
Debarcation enplaning schedules, 1143
Deception, subsidiary landings, 512
Deception, tactical, task groups, 124a(10)
Definition, concept of, 101
Defense plan, nuclear weapons, 853
Demonstration force, 241
Demonstrations, amphibious, 1800
Destruction of defenses ashore, 1533a(1)
Directive, amphibious planning, 331
Directive, initiating, 200
Disagreements, 277
Drafts, distribution of, amphibious planning, 334
Drop zones, 460

E

Economy, organization and command, 212
Embarkation:
 block stowage, 1250a(3)
 concept of, 109
 definition of, 1200
 execution of, 1260
 factors in the selection of areas and points,
 1223, Fig. 12-1
 horizontal stowage, 1250a(1)
 loading plans, content of, and embarkation plans,
 1230
 loading, types of, 1240
 administrative, 1240a(1)
 combat, 1240a(2)
 combat organizational, 1240a(2)(b)
 combat spread, 1240a(2)(c)
 combat unit, 1240a(2)(a)
 commodity, 1240a(2)(d)
 selective, 1240a(2)(e)
 organization for, 1210
 assault task force organization, 1210a(1)
 landing force organization, 1210a(2)
 parallel organizations, 1210a(3)
 planning, 1220
 considerations, 1222
 responsibilities, 1221
 sequence of, 1223
 plans, content of, and loading plans, 1230

Embarkation—continued
 responsibilities in the execution of, 1261
 amphibious task force commander, 1261a(1)
 external agencies, 1261a(3)
 individual ship commanders, 1261a(4)
 landing force commander, 1261c(2)
 team commander, 1261a(5)
 selection of areas and points, 1223, Fig. 12-1
Enemy:
 denial of areas to, 511
 protection against communications counter-

F

Field artillery, 750
Fire support, task groups, 224a(4)
Fixed wing aircraft landing zones, 460
Forces, organization and command, 220
Functions, transfer command of, 280

G

Garrison planning, 1090
General, concept of, 100

H

Helicopter:
 assault control, 1622
 availability schedule, 1142a(8)
 employment and assault landing table, 1142a(10)
 landing diagram, 1142a(9)
 landing zones, 450
 transport, objective area, 1434a(2)(e)
Helitine wave and serial assignment table, 1142a(11)

I

Intelligence:
 annex, 650,660
 dissemination of, 323, 640
 estimate, 630
 information, collection of, 323, 620
 planning
 agencies and sources, 610
 reconnaissance agencies, 610a(1)
 sources, 610a(2)
 amphibious task force commander, 601
 commander, landing force, 602
 commanders, other force, 603
 counterintelligence, 650
 information, collection of, 620
 requirements, planning of, 600

Intelligence--continued

- responsibilities, planning of, 600
- security, 650
- pre-assault, 1540
- requirements, 600
- responsibilities of, 600
- security, 650

L

- Landing areas and beachheads, 420--423, Fig. 4-1
- Landing beaches, 440
- Landing craft and amphibian vehicle assignment, 1142a(6)
- Landing craft availability table, 1141a(1)
- Landing craft employment plan, 1141a(2)
- Landing, date and hour, 470, 479b, Fig. 4-3
- Landing diagram, 1142a(7)
- Landing documents, navy responsibility for, 1141
- Landing force, naval authority over, 272
- Landing force, organization and command, 225
- Landing force, responsibilities of landing documents, 1142
- Landing sequence table, 1142a(4)
- Landings in low visibility:
 - definition and purpose, 2000
 - operational considerations, 2020
 - air support, 2020a(9)
 - equipment, 2020a(6)
 - landing force reconnaissance unit, 2020a(3)
 - minesweeping, 2020a(2)
 - naval gunfire, 2020a(8)
 - navigation and control, 2020a(4)
 - protection, 2020(4)(b)
 - ship-to-shore movement, 2020a(7)
 - special preparations, 2020a(6)
 - underwater demolition team, 2020a(3)
 - weather and hydrography, 2020a(1)
- planning, 2010
- rehearsals for landing in reduced visibility, 2030
- Loading, combat, 1240
- Loading, embarkation, 1240
- Loading plans, 1230
- Logistic plans, 1040
- Logistics, assault, 1670
- Logistics planning:
 - base development and garrison planning, 1090
 - considerations, 1091
 - responsibilities, 1092
 - logistic planning considerations in amphibious operations, 1010, Fig. 10-1
 - logistic functions, 1010b
 - logistic planning factors, 1010c
 - logistic principles, 1010a

Logistics planning--continued

- logistic planning responsibilities, 1020
 - amphibious task force commander, 1021
 - commander(s) of other major forces, 1023
 - landing force commander, 1022
- logistic planning scope of, 1000
- logistic planning sequence, 1030
- logistic plans, 1040
- medical planning, 1060, 1063
 - amphibious task force, 1063c
 - landing force, 1063b
- plans for resupply, 1053
 - considerations, 1061
 - responsibilities, 1062
- pontoon causeway and litterage planning, 1080
 - considerations, 1081
 - plans, 1083
 - responsibilities, 1082
- shore party plan, 1073
- shore party planning, 1070
 - considerations, 1071
 - responsibilities, 1072
 - amphibious task force commander, 1072a(1)
 - landing force commander, 1072a(2)
- supply planning, 1050
 - civilian populations and prisoners of war, 1052c
 - content of the, 1054
 - initial for, 1052
 - landing force, 1052b
 - navy forces, 1052a
 - responsibilities, 1051
- Low visibility, landings in, 2000

M

- Medical planning, 1060, 1063
- Memoranda, amphibious planning, 333
- Mine warfare task group, 224a(8)
- Movement, concept of, 111
- Movement to the objective area:
 - accomplishment, 1400
 - air echelon, 1401
 - approach, 1460
 - advance force, 1461
 - coordination, 1465
 - demonstration force, 1463
 - later echelons, 1464
 - main body, 1462
 - communications, 1455
 - coordination, 1456
 - D-day groups, 1412
 - logistics, 1453
 - navigational aids, 1457
 - organization, 1410
 - passage at sea, 1450

Movement to the objective area—continued
planning, 1420

- alternate plans, 1420d
- coordination with other forces, 1420b
- postponement, 1420c
- responsibility, 1420
- post D-day, 1413
- pre-D-day groups, 1411
- protective measures en route, 1452
- reference points, geographic, 1436
- regulating points, 1435
- sea areas, 1434
 - objective areas, 1434a(2)
 - amphibian vehicle launching, 1434a(2)(h)
 - antisubmarine screening, 1434a(2)(a)
 - control ship, 1434a(2)(g)
 - fire support, 1434a(2)(f)
 - helicopter transport, 1434a(2)(e)
 - inner transport, 1434a(2)(d)
 - outer landing ship, 1434a(2)(c)
 - outer transport, 1434a(2)(b)
 - ocean operating areas 1434a(1)
 - sea echelon 1434a(3)
- routes, areas and points, 1430
- sea routes in the objective area, 1432
- sea routes to the objective area, 1431
- security, 1440
- shipping follow-up, 1414
- staging areas, 1433
- training en route, 1554
 - landing force, 1454a(2)
 - naval, 1554a(1)

N

Naval forces, assault, 1612

Naval gunfire, landings in low visibility, 2020c(8)

Navy forces, 224

Nuclear weapons planning:

- conduct of nuclear warfare defense, 854
- content of defense plan, 853
- content of the support plan, 840
- defense against, 850
- employment of, 800
- planning considerations, 830
- planning responsibilities, 810
- planning sequence, 820
- preparation of the defense plan, 852
 - active defense, 852a(1)
 - passive defense, 852a(2)
 - special provisions for the ship-to-shore movement, 852a(3)
- responsibility for defense planning, 851
- amphibious task force commander, 851a
- landing force commander, 851b

Nuclear weapons planning—continued

- selection of targets, 832
 - preliminary target evaluation, 832a(1)
- selection of weapons and means of delivery, 833
- target analysis, 832a(2)
- supply and resupply, 831
- timing of attack of targets, 834
 - D-day prearranged fires, 834a(2)
 - prearranged fires, 834a
 - pre-D-day prearranged fires, 834a(1)
 - target of opportunity fires, 834(b)
- Numerical designation, 222

O

Objective area:

- movement to, 1400
- planning, 1420

Operational types, concept of, 104

Operations, ashore, 430, Fig. 4-2

Operations, cold weather, 2100

Organization and command:

- administrative control, 278
- advance force, 240
- air force forces, 226
- amphibious task force, 223
- assault, 1610
- attack and parallel landing groups, 230
- command, delegation of to subordinate levels, 279
- command during operations, 270
- command, parallel chains of, 213
- commanders, designation of, 250
- commanders, reporting of, 271

consultation between corresponding commanders, 273, 274

corresponding commanders at subordinate levels, 276

delegation of command to subordinate levels, 279

demonstration force, 241

directive, initiating, 200

disagreements, 277

economy, 212

forces, 220

functions, transfer control of, 280

initiating directive, 200

landing force, 225

- organization, 225c
 - basic tactical, 225c(1)
 - embarkation, 225c(3)
 - landing, 225c(2)
 - tactical, basic, 225c(1)

landing force, Naval authority over, 272

landing groups, attack and parallel, 230

- attack, 230b(1)
- landing, 230b(2)

Organization and command—continued

Navy forces, 224

task groups, 224a

administrative 224a(14)

air transport, 224a(13)

close covering, 224a(11)

control, 224a(2)

fire support, 224a(4)

mine warfare, 224a(8)

patrol plane, 224a(12)

reconnaissance and underwater demolition,
224a(9)

screening, 224a(7)

shore-based tactical air, 224a(5)

support carrier, 224a(6)

tactical air control, 224a(3)

tactical deception, 224a(10)

transport, 224a(1)

numerical designation, 222

other forces, 227

parallel chains of command, 213

relationships during planning, 260

task grouping, 211

task organization, 221

transfer of control of functions, 280

Other forces, 227

coordination with, 1536

P

Parallel landing groups, 230

Patrol planes, task group, 224a(12)

Planning, concept of, 108

Planning, ship-to-shore, 1120

Planning shore party, 1070

Planning, supply, 1050

Preassault operations:

advance force, 1530b

beach reconnaissance, 1533a(4)

decision to employ an advance force, 1531

demonstrations, 1533a(7)

destruction of defenses ashore, 1533a(1)

electronic countermeasures, 1533a(8)

isolation of the objective, 1533a(5)

pre-D-day landings, 1533a(6)

preparation of beaches and beach approaches,
1533a(3)

preparation of sea areas, 1533a(2)

protection of, 1537

tasks, 1533

considerations in planning advance force
operations, 1534

coordination with other forces, 1536

air, 1536a(1)

demonstration forces, 1536a(2)

submarine forces, 1536a(3)

Preassault operations—continued

deception, 1510

dissemination of intelligence, 1540

evaluation, 1550

operations prior to arrival in advance force, 1520

purpose and scope, 1500

responsibilities for planning advance force
operations, 1532

advance force commander, 1532a(3)

amphibious task force commander, 1532a(2)

landing force commander, 1532a(1)

landing group commander, 1532a(4)

supporting arms, 1535

artillery, 1535a(2)

control and coordination, 1535a(3)

naval gunfire and air support, 1535a(1)

Pre-D-day landings, 1533a(6)

Principles of organization and command, 210

Program, amphibious planning, 332

Protection of advanced force, 1537

Purpose, concept of, 102

R

Reconnaissance, task groups, 224a(9)

Rehearsal, concept of, 110

Rehearsals:

briefings, preoperational, 1340

feasibility of rehearsal, 1360

definition and purpose, 1300

planning considerations, 1320

security, 1350

types of, 1330

integrated, 1330a(3)

separate force, 1330a(1)

staff, 1330a(2)

integrated rehearsals, 1330a(3)

preoperational briefings, 1340

Rehearsal plans, 1310

security, rehearsal, 1350

separate force rehearsals, 1330a(1)

staff rehearsals, 1330c(2)

stowage, methods of, 1250

block, 1250a(3)

horizontal, 1250a(1)

vertical, 1250a(2)

types of rehearsals, 1330

Relationships during planning, organization and
command, 260

Relative strengths requirements, 106

Resupply, plans for, 1053

Routes, objective area, 1430

S

Scope, amphibious planning, 300

Scope, concept of, 103

Screening, task groups, 224a(4)
 Sea areas, objective area, 1434
 Sea echelon plan, 1141a(5)
 Security:
 amphibious planning, 325
 objective area, 1440
 Sequence, concept of, 107
 Serial assignment table, 1142a(5)
 Ship-to-shore movement planning:
 assault, 1642
 debarkation schedule, 1143a(1)
 helicopter enplaning schedule, 1143a(2)
 serial numbers, 1050
 landing force responsibilities for preparation
 of landing documents, 1142
 amphibian vehicle availability table,
 1142a(1)
 amphibian vehicle employment plan,
 1142a(2)
 assault schedule, 1142a(3)
 helicopter availability table, 1142a(8)
 helicopter employment and assault
 landing table, 1142a(10)
 helicopter landing diagram, 1142a(9)
 heliteam wave and serial assignment
 table, 1142a(11)
 landing diagram, 1142a(7)
 landing craft and amphibian vehicle
 assignment table, 1142a(6)
 landing sequence table, 1142a(4)
 serial assignment table, 1142a(5)
 definition, purpose, scope, 1100
 Navy responsibility for preparation of landing
 documents, 1141
 approach schedule, 1141a(3)
 assault area diagram, 1141a(4)
 landing craft availability table, 1141a(1)
 landing craft employment plan, 1141a(2)
 sea echelon plan, 1141a(5)
 low visibility, 2020a(7)
 planning considerations, 1120
 planning sequence, 1130
 relation to other planning, 1101
 responsibilities, 1110
 amphibious task force commander, 1111
 attack group commander, 1113
 commanders of other major forces, 1114
 landing force commander, 1112
 landing group commander, 1113
 preparation of the landing plan, 1140
 Staffs, early assembly of, 322
 Staging areas, objective area, 1433
 Stowage, methods of, for embarkation, 1250
 Subsidiary landings:
 capture of specific positions, 510
 airfields or airfield sites, 510c
 Subsidiary landings--continued
 air warning and control, 510d
 artillery, 510a
 early logistical support, 510b
 missile, 510a
 Naval base, temporary advanced, 520e
 rocket, 510a
 safe anchorages, 510e
 cover and deception, 512
 denial of areas to enemy, 511
 general, 500
 purposes of subsidiary landings, 501
 specific positions, capture of, 510
 Submarine forces, 1536a(3)
 Supply plans, civilian population, 1052a
 Supply plans, landing force, 1052b
 Supply plans, navy forces, 1052a
 Supply plans, prisoners of war, 1052a
 Support plan, nuclear weapons, 840
 Supporting arms, assault, 1643
 Supporting arms in amphibious withdrawals, 1760
 Supporting arms planning:
 air operations control, 735
 amphibious task force commander arrival
 of, 735a(2)
 attack groups, 735a(3)
 pre-D-day, 735a(1)
 air support, 730, 731
 air craft availabilities, 731a(5)
 centralized control, 731a(1)
 control agencies, access to, 731a(3)
 deployment ashore, 731a(4)
 local air superiority, 731a(2)
 sequence of planning, 734
 antimechanized defense, 754
 coordination, 720, 722, Fig. 7-1
 field artillery, 750
 air observation, 752
 antiaircraft, 753
 landing of, 751
 naval gunfire, 740
 conduct of fire, 749
 control of, 748
 D-day, 745
 planning, 740, 741, 742
 post-D-day, 746
 pre-D-day, 744
 sequence, 743
 techniques, 747
 requirements, 700
 responsibilities, 710, 721, 732, 733
 support plans, content of, 736
 Supporting arms, pre-assault, 1535
 Supporting operations, concept of, 105

T

Task force

- amphibious, 223
- organization and command, 223
- Task groups, Navy, 224a
- Tasks of advanced force, 1533
- Termination of operations, concept of, 113
- Time factor, amphibious planning, 326
- Training en route to the objective area, 1554
- Transport, task groups, 224a(1)

U

- Underwater demolition, task groups, 224a(9)

W

Waterborne, assault control, 1621, Fig. 16-1

Weapons:

- amphibious planning, 328
- nuclear, 800-854
 - defense against, 850
 - defense plan, 852
 - employment of, 800
 - planning, 830
 - responsibility for defense, 851
 - responsibilities, 810
 - selection of, 833
 - selection of targets, 832
 - supply and resupply, 831
 - timing of attack, 834
- Withdrawals, amphibious, 1700

CHAPTER 1

THE CONCEPT OF AMPHIBIOUS OPERATIONS

CONTENTS

100	GENERAL
101	Definition and Characteristics
102	Purpose
103	Scope
104	Operational Types
105	Supporting Operations
106	Relative Strength Requirements
107	Sequence
108	Planning
109	Embarkation
110	Rehearsal
111	Movement
112	Assault
113	Termination of an Amphibious Operation

CHAPTER 1

THE CONCEPT OF AMPHIBIOUS OPERATIONS

100 GENERAL

a. Amphibious warfare integrates virtually all types of ships, aircraft, weapons, and landing forces in a concerted military effort against a hostile shore. The inherent naval character of the amphibious attack is reflected in the principles which govern the organization of the forces involved and the conduct of the operation.

b. The essential usefulness of the amphibious operation stems from mobility and flexibility, i.e., the ability to concentrate balanced forces and to strike with great strength a selected point in the hostile defense system. The amphibious operation exploits the element of surprise and capitalizes upon enemy weaknesses through application of the required type and degree of force at the most advantageous locations at the most opportune times. The mere threat imposed by the existence of powerful amphibious forces may induce the enemy to disperse his forces, and this, in turn may result in his making expensive and wasteful efforts in attempting to defend his coast line.

c. The salient limiting characteristic of the amphibious operation is the necessity of building up combat power ashore from an initial zero to full coordinated striking power as the attack drives toward the final objectives. The special measures introduced to meet this limitation form the basis of the organizational and technical differences existing between amphibious and land warfare.

d. The amphibious assault must be conducted in the face of certain additional and distinguishing difficulties. Natural forces—unfavorable weather, seas, surf, and features of hydrography—represent hazards not normally encountered in land warfare. Technical problems of logistics represented by loading thousands of troops and large quantities of material into ships at widely separated embarkation points, moving them to the objective; then landing them in exactly the proper sequence, usually on open beaches or landing zones and under fire initially, all require extraordinary attention in the form of detailed planning. During the movement from ship-to-shore, troops are especially vulnerable. Possible employment of mass destruction

weapons by the enemy is a threat to the amphibious task force, as to any other offensive concentration, and requires the exercise of vigorous measures both active and passive during all stages of the operation.

e. The closest cooperation and most detailed coordination among all participating forces in an amphibious operation are essential to success. They must be trained together. There must be a clear understanding of mutual obligations and of the special capabilities and problems of each component. These factors tend to create problems in preparation for an amphibious operation that are more extensive than for other types of military operations.

101 DEFINITION AND CHARACTERISTICS

a. An amphibious operation is an attack launched from the sea by naval and landing forces embarked in ships or craft involving a landing on a hostile shore. It normally requires extensive air participation and is characterized by closely integrated efforts of forces trained, organized, and equipped for different combatant functions.

b. Combat operations which involve waterborne movement, such as inland-water, ferrying, and shore-to-shore operations in which the landing forces are not embarked in naval ships; waterborne administrative landings on friendly territory; and water terminal and logistics over-the-shore operations possess certain characteristics and employ some of the techniques of an amphibious operation. However, these are not amphibious operations.

102 PURPOSE

a. Amphibious operations are conducted to establish a landing force on a hostile shore in order to:

- (1) Prosecute further combat operations.
- (2) Obtain a site for an advanced naval or air base.
- (3) Deny the use of an area or facilities to the enemy.

103 SCOPE

The amphibious operation is a complete operation within itself. As an entity, amphibious operation

includes planning; embarkation of troops and equipment; rehearsals; movement to the objective area; final preparation of the objective; assault landing of troops and accompanying supplies and equipment; and support of the landing force until termination of the amphibious operation. An amphibious operation may include airborne operations. The amphibious operation does not include marshaling of forces; preliminary training in amphibious techniques; initial preparation of the objective area; independent supporting operations; and operations subsequent to the termination of the amphibious operation.

104 OPERATIONAL TYPES

a. Principal Type. Amphibious assault. The amphibious assault is the principal operational type of amphibious operation. It involves the landing and establishment of a landing force on a hostile shore.

b. Lesser Included Types. These types have distinctive features of amphibious operations but do not involve establishing a landing force on a hostile shore. The doctrine contained herein applies to these types.

(1) Amphibious Withdrawal. The withdrawal of forces by sea in naval ships or craft from a hostile shore.

(2) Amphibious Demonstration. An operation conducted for the purpose of deceiving the enemy by a show of force with the expectation of deluding the enemy into a course of action unfavorable to him.

(3) Amphibious Raids. Amphibious raids are landings from the sea on a hostile shore involving swift incursion into, or a temporary occupancy of an objective, followed by a planned withdrawal. Raids are conducted for such purposes as:

- (a) Inflicting loss or damage.
- (b) Securing information.
- (c) Creating a diversion.
- (d) Capturing or evacuating individuals and/or materiel.

105 SUPPORTING OPERATIONS

a. Prior and concurrent operations as required, are conducted by forces other than those assigned to the amphibious task force. While such operations may be in response to requests by the amphibious task force commander, they are ordered by higher authority and are conducted outside the area for which the amphibious task force commander is responsible at the time of their execution. Examples of supporting operations are:

(1) Feints or demonstrations intended for purposes of deception.

(2) Isolation of the objective area by interdicting the movement thereto of enemy forces.

(3) Air operations designed to assist in gaining or maintaining air, ground, or naval supremacy.

b. Operations conducted in the objective area by elements of the amphibious task force prior to the arrival of the major assault elements of that force are distinguished as pre-assault operations rather than supporting operations.

106 RELATIVE STRENGTH REQUIREMENTS

a. In order to achieve success, an amphibious force should be assured of naval supremacy against enemy surface and submarine forces, preponderant air superiority, and a substantial superiority over enemy forces ashore in the objective area. In the face of compelling necessity, however, an amphibious operation may be undertaken on the basis of a reasonable total superiority of force. For example, surface and air superiority may justify a landing even though the amphibious task force does not possess the desired numerical superiority in landing forces, provided our own surface and air units can be used effectively against enemy forces. In addition to a preponderance of force within the objective area, an amphibious task force should have reasonable assurance of:

(1) Freedom from effective interference by enemy surface, subsurface, and air or ground forces from outside the objective area; and

(2) The ability to provide continuous support for the forces ashore.

107 SEQUENCE

The principal operational type, the amphibious assault, follows a well defined pattern. It includes a sequence of events or activities, which is also recognizable, although to a lesser degree, in the other types. These occur in the general sequence of planning, embarkation, rehearsal, movement to the objective, and finally, assault and capture of the objective. Planning, for example, occurs throughout the entire operation but is dominant only in the period prior to embarkation. Successive phases, therefore, bear the title of the dominating activity taking place within the period covered. Operational incidents which do not involve participation of the force as a whole are not so designated.

108 PLANNING

The planning phase denotes the period extending from the issuance of the initiating directive to embarkation. During this phase, the necessary preparatory measures, including coordinate planning, are effected. Although planning does not cease with the termination of this phase, it is useful to distinguish between the planning phase and the subsequent operational phases, since a marked change occurs in the relationship between the commanders of the various service components at the time the planning phase is terminated and the operational phases begin. During the planning phase, the amphibious task force commander coordinates planning. Any differences which commanders of the components of the amphibious task force cannot resolve are referred to their common superior. At the commencement of the operational phases, the commander of the amphibious task force assumes full responsibility for the entire force and for the operation.

109 EMBARKATION

The embarkation phase is the period during which the forces, with their equipment and supplies, are embarked in the assigned shipping.

110 REHEARSAL

The rehearsal phase is the period during which the prospective operation is rehearsed for the purpose of (1) testing the adequacy of plans, the timing of detailed operations, and the combat readiness of participating forces; (2) ensuring that all echelons are familiar with plans; and (3) testing communications.

111 MOVEMENT

In this phase the components of the amphibious task force move from the points of embarkation to the objective area. This move may be via rehearsal, staging, and/or rendezvous areas. The movement phase is completed when the components of the amphibious task force arrive in their assigned positions in the objective area.

112 ASSAULT

The assault comprises the period between the arrival of the major assault forces of the amphibious task force in the objective area and the accomplishment of the amphibious task force mission. Development of the area for its ultimate use may be initiated during this period.

113 TERMINATION OF AN AMPHIBIOUS OPERATION

a. The termination of the amphibious operation is predicated on the accomplishment of the mission of the amphibious task force in accordance with the specific conditions contained in the governing instructions set forth in the initiating directive (Article 200). The firm establishment of the landing force ashore is usually specified as one of these conditions.

b. The landing force is regarded as firmly established ashore when in the opinion of the landing force commander:

- (1) The force beachhead has been secured.
- (2) Sufficient tactical and supporting forces have been established ashore to ensure the continuous landing of troops and material requisite for subsequent operations.
- (3) Command, communications, and supporting arms coordination facilities have been established ashore.
- (4) The landing force commander has stated that he is ready to assume full responsibility for subsequent operations.

c. When the Amphibious Task Force Commander and the Landing Force Commander are satisfied that the conditions of sub-para. 113.a. and b. above have been met, the Amphibious Task Force Commander will report these facts to higher authority designated in the initiating directive. This authority will then terminate the amphibious operation, dissolve the amphibious task force, and provide additional instructions as required, to include command arrangements and disposition of forces to be thereupon effective. (See para. 200b(7)(a).)



CHAPTER 2

ORGANIZATION AND COMMAND

CONTENTS

200	THE INITIATING DIRECTIVE
210	PRINCIPLES OF AMPHIBIOUS ORGANIZATION
211	Task Grouping
212	Economy
213	Parallel Chains of Command
220	FORCES
221	The Task Organization
222	Numerical Designation
223	The Amphibious Task Force
224	Navy Forces
225	Landing Force
226	Air Force Forces
227	Other Forces
230	ATTACK GROUPS AND THEIR PARALLEL LANDING GROUPS
240	ADVANCE FORCE
241	Demonstration Force
250	DESIGNATION OF COMMANDERS
260	RELATIONSHIPS DURING PLANNING
270	COMMAND DURING OPERATIONS
271	Reporting of Commanders
272	Naval Authority Over Landing Force Units
273	Consultation Between Commanders
274	Consultation Between Corresponding Commanders
275	Personnel Under Corresponding Commanders
276	Corresponding Commanders at Subordinate Levels
277	Disagreements
278	Administrative Control
279	Delegation of Command Authority to Subordinate Levels
280	Transfer of Control of Functions

CHAPTER 2

ORGANIZATION AND COMMAND

200 THE INITIATING DIRECTIVE

a. The initiating directive is an order directed to the amphibious task force commander, with copies to the landing force and other major subordinate commanders, to conduct an amphibious operation. It is issued by the commander having over-all responsibility for the operation.

b. The initiating directive:

(1) Provides for the establishment of an amphibious task force and the assignment thereto of a mission and the necessary forces to accomplish the mission.

(2) Designates the amphibious task force commander; the landing force commander, and other commanders as appropriate.

(3) Provides special instructions on command relationships, if required.

(4) Positively defines the amphibious objective area in terms of sea, land, and air space, and prescribes command authority within the amphibious objective area.

(5) Provides a code name and sets target dates for the execution of the operation.

(6) Contains special instructions, as required, pertaining to the allocation, employment, and control of nuclear, chemical, and biological weapons.

(7) Includes:

(a) Positive instructions governing termination of the operation and, as feasible at this time, the command arrangements and disposition of forces to be thereupon effective.

(b) Information regarding operations to be conducted after termination of the amphibious operation.

(8) Provides information or assigns responsibility, as appropriate, for the conduct of combat or logistic operations related to or in support of the amphibious operation and coordinating instructions pertaining thereto.

210 PRINCIPLES OF AMPHIBIOUS ORGANIZATION

The considerations that govern task organization of forces for any combat operations apply to amphibious operations. However, the organiza-

tion for the execution of the amphibious operation reflects the interrelationship between the tasks of the landing force and the tasks of the corresponding naval forces at every level. This relationship dictates that special emphasis be given to task grouping; economy; and parallelism of command.

211 TASK GROUPING

After the mission has been analyzed, and the forces necessary to accomplish various component tasks have been determined, the landing force units are allocated to task groups according to their assigned tasks. There is then established a parallel task organization of those naval components which provide assault shipping and support for the troops. The task organization of the amphibious task force is based primarily on the requirement for establishing the landing force ashore.

212 ECONOMY

Amphibious operations make extensive demands on assault shipping. The limited availability of assault shipping requires that the landing force be composed only of those units for which a genuine need is foreseen.

213 PARALLEL CHAINS OF COMMAND

a. The interrelation of naval and landing force tasks during the planning for and execution of the amphibious operation requires the establishment of parallel chains of command and corresponding commanders at all levels of the amphibious task force organization. The following fundamental considerations govern the application of such a system of parallel command:

(1) Except during the planning phase, the amphibious task force commander, a Navy officer, is responsible for the operation and exercises that degree of authority over the entire force necessary to ensure success of the operation.

(2) The amphibious task force and landing force commanders are on a corresponding level of command with regard to their respective components.

(3) Corresponding commanders are established at each subordinate level of both naval and landing force elements.

(4) Matters of command which affect only the Navy forces are dealt with by the amphibious task force commander through the naval chain of command.

(5) Matters of command which affect only the landing forces are dealt with by the landing force commander through the landing force chain of command.

(6) Matters of command which affect both the naval force and the landing force are dealt with through the corresponding naval and landing force chains of command. Commanders at all levels are required to maintain a close and continuous relationship to ensure that, except in emergencies, no commander makes decisions affecting corresponding commanders without consultation. In such cases the commander making the emergency decision will notify corresponding commanders of his action at the earliest practicable time.

(7) Detailed provisions covering special command arrangements not otherwise provided for herein must be clearly specified for each operation.

220 FORCES

a. The principal fleets are organized for administrative purposes into various type commands. Among these are the amphibious forces and the fleet Marine forces. When forces of the naval establishment only are used in an amphibious operation, they are provided by the fleet type commands in accordance with the directives of the fleet commander. The participation of Army and Air Force units in an amphibious operation is directed by the commander of a unified or specified command or higher authority.

b. For variations when a part of the air support effort is provided from Air Force sources, see Article 226.

221 THE TASK ORGANIZATION

The task organization of the amphibious task force as a whole must meet the requirements of embarkation, movement to the objective, protection, landing, and the support of the landing force. No standard organization is applicable to all situations that may be encountered in an amphibious operation. For this reason, the task organization is determined in accordance with the requirements of the anticipated tactical situation. Flexibility of task grouping is essential. Once the organization has been promulgated, the task organization titles of the various task components

of the force are used exclusively for operational purposes. Administrative titles are retained for administrative purposes only.

222 NUMERICAL DESIGNATION

The standard numerical designation system is used for Navy forces in the amphibious task force organization. In the landing force organization, normally only the landing force is given a numerical designator. If separate attack groups are formed, however, the corresponding landing groups will be given numerical designations. Other major task groupings are numerically designated as necessary.

223 THE AMPHIBIOUS TASK FORCE

a. The task organization formed for the purpose of conducting an amphibious operation is the amphibious task force. The amphibious task force always includes Navy forces and a landing force, with their organic aviation.

b. The components of the amphibious task force are described in the following articles.

224 NAVY FORCES

a. The Navy elements in an amphibious task force include such of the following task groups as are required for the operation. For simplicity and more effective control, two or more of these groups may be combined. Others may be added as necessary. Normal task organization titles are used below but they may be altered at the discretion of the amphibious task force commander.

(1) Transport Groups. Groups which provide for the embarkation, movement to the objective, landing, and logistic support of the landing force. They comprise all shipping in which the landing force is embarked, including the shipping which transports the helicopters and the helicopter-borne troops. The landing craft to be employed in the ship-to-shore movement are included in the transport groups.

(2) Control Group. Personnel, ships and craft designated to control the waterborne ship-to-shore movement.

(3) Tactical Air Control Groups. Shipborne organizations necessary to operate a tactical air control center and a tactical air direction center (afloat) for the control of air operations.

(4) Fire Support Groups. Groups of battleships, cruisers, destroyers, rocket ships and other types assigned to provide naval gunfire, rocket fire,

and guided missile support for the landing and subsequent operations ashore.

(5) Shore-Based Navy Tactical Air Groups. Task organizations of tactical air units assigned to the amphibious task force which are to be land-based within, or sufficiently close to, the objective area to provide tactical air support to the amphibious task force.

(6) Support Carrier Group. A task organization of aircraft carriers with embarked aircraft and supporting ships, which provides naval air support to the amphibious task force.

(7) Screening Group. A task organization to furnish protection to the amphibious task force enroute to the objective area and during operations in the objective area.

(8) Mine Warfare Group. A task organization which conducts offensive and defensive mine operations in support of the amphibious task force.

(9) Reconnaissance and Underwater Demolition Group. A task organization including ships, embarked reconnaissance troops and underwater demolition teams, which conduct reconnaissance, hydrographic surveys, and demolition of natural or man-made obstacles.

(10) Tactical Deception Group. A task organization which conducts deception operations against the enemy, including electronic, communication, visual, and other methods designed to misinform and confuse the enemy.

(11) Close Covering Group. A task organization which provides protection against attack by aircraft and surface ships. It is ordinarily composed of battleships, cruisers, destroyers, and aircraft carriers, as needed.

(12) Patrol Plane Group. A task organization of patrol aircraft units which conduct such missions as scouting, reconnaissance, and anti-submarine operations while the amphibious task force is enroute to, and in, the objective area.

(13) Air Transport Group. A task organization of transport aircraft units which provide air transport for landing force components or provides logistical support.

(14) Administrative Group. The agency which is responsible for administrative and special details in the objective area: repair and salvage, hydrographic surveys, laying of nets, buoys and beacons, initial harbor development and control, port control functions, boat pools, mail, and other tasks as assigned. During the initial stages of the assault, virtually all administrative functions

are performed by the amphibious task force commander or his subordinates participating in the assault. Administrative duties are passed to the commander of the administrative group as the progress of the assault permits.

225 LANDING FORCE

a. The landing force comprises the troop units, aviation and ground, assigned thereto to conduct the amphibious assault. When used in this publication in connection with specific task organization, the term designates the highest landing force echelon, and the landing force commander is the senior landing force officer in the amphibious task force.

b. The landing force is specially organized for the following functions, which are peculiar to the amphibious operation:

(1) Embarkation of troops, equipment and supplies.

(2) Debarkation and landing of troops by helicopter, fixed wing aircraft and/or landing craft, or amphibian vehicle.

(3) Conduct of assault operations.

(4) Conduct of naval gunfire and missile support.

(5) Provision and control of air support.

(6) Discharge of cargo from assault shipping, and landing and movement of material across the beaches.

(7) Operation and tactical employment of amphibian vehicles and helicopters.

c. The amphibious assault demands that the landing force, at various times during every operation, be organized in one of three functional forms, the latter two of which are peculiar to amphibious operations alone:

(1) The Basic Tactical Organization. This is the conventional organization of the landing force units for combat, involving various combinations of infantry, supporting ground arms and aviation for accomplishment of missions ashore. This organizational form is employed as soon as possible during the battle for the beachhead following the landing of the various assault components of the landing force.

(2) The Organization for Landing. This is the specific tactical grouping of forces for the assault.

(3) The Organization for Embarkation. This is the administrative grouping of forces for the overseas movement. It includes, in any vessel or embarkation group, the task organization which is

established for landing as well as additional forces embarked for purposes of transportation, labor, or for distribution to achieve a maximum of security.

226 AIR FORCE FORCES

a. When the preponderance of tactical aviation assigned to the amphibious task force is provided by the Air Force an air support force will be formed. An Air Force officer will be designated as the air support force commander and, with respect to his own forces, enjoys a status similar to the landing force commander and the amphibious task force commander, subject to the overall command authority of the amphibious task force commander. Organic Navy and landing force aviation will be organized as subordinate task organizations of the Navy and landing forces. The air support force commander may be designated the tactical air commander, and direct the total air effort in the objective area, under the amphibious task force commander. He will use the control agency aboard the amphibious task force flagship augmented as necessary by Air Force personnel. When designated tactical air commander he will also be responsible for the preparation of the amphibious task force air plan.

b. When the preponderance of aviation comes from the Navy or Marine Corps any participating Air Force units will, nevertheless, be organized as a separate task group under the command of an Air Force officer. An Air Force staff representative will then be assigned to the amphibious task force commander's staff. The overall air effort in the objective area will be directed by a naval aviator (tactical air commander) under the amphibious task force commander.

227 OTHER FORCES

a. Forces other than those discussed above may be assigned temporarily to the amphibious task force for the initiation of special tasks which are not part of the amphibious operation.

b. Garrison and base development units, when assigned, are included in such forces. With respect to these and other special units which may similarly be assigned, the landing force commander provides for their embarkation, landing and for the initiation of assigned tasks as permitted by the progress of operations ashore.

230 ATTACK GROUPS AND THEIR PARALLEL LANDING GROUPS

a. Under certain circumstances it may be necessary to form subordinate parallel task groups within the amphibious task force. The decision to do so is made during planning by the amphibious task force commander after consultation with the landing force commander and is based on the following:

(1) Simultaneous or nearly simultaneous assaults in areas so widely separated as to preclude effective control by a single tactical commander; or

(2) The size of the forces involved precludes effective centralized control

b. When required, subordinate task groups are established as follows:

(1) Attack Group. An attack group is a subordinate task organization of the Navy force. It is composed of assault shipping and supporting naval units designated to transport, protect, land and support a landing group.

(2) Landing Group. A landing group is a subordinate task organization of the landing force. It is composed of especially organized, trained and equipped troops, including their aviation, capable of conducting landing operations against a position or group of positions so located as to permit their capture by troops operating under a single tactical command.

c. Under certain conditions, as described in Article 279, an attack group commander may be delegated command authority over a corresponding landing group.

240 ADVANCE FORCE

a. An advance force is a component of the amphibious task force which precedes the main body to the objective area. Its function is to prepare the objective for assault by conducting such operations as reconnaissance, minesweeping, preliminary bombardment, underwater demolition operations, and air operations. As many of the following components as may be required are included:

- (1) Tactical air control group
- (2) Fire support group
- (3) Support carrier group
- (4) Screening group
- (5) Mine warfare group

- (6) Reconnaissance and underwater demolition group
- (7) Tactical deception group
- (8) Close covering group
- (9) Demonstration group.

b. If subsidiary operations, such as the capture of offshore islands, or more extensive land reconnaissance operations, are to be conducted, a landing group, a transport group, and a control group may be included in the advance force.

c. The advance force usually is dissolved on D-day and its components reassigned to other parts of the amphibious task force. The exact time of this dissolution and reassignment must be disseminated so that all interested commands will be apprised of the shift in responsibility.

241 DEMONSTRATION FORCE

A demonstration force is a component of an amphibious task force organized to conduct operations intended to deceive the enemy. It may include an embarked landing force and any of the components listed in article 240 required for performance of the mission.

250 DESIGNATION OF COMMANDERS

Regardless of the composition of the amphibious task force the amphibious task force commander is a Navy officer. He is designated in the initiating directive. The commander of all troop components within the amphibious task force is called the landing force commander (Army or Marine Corps) and is also designated in the initiating directive. Commanders of subordinate task groups within the amphibious task force, if they have not been named in the initiating directive, are designated by the amphibious task force commander or the landing force commander, as appropriate. Should significant Air Force forces be assigned, their commander, (an Air Force officer), will be designated in the initiating directive.

260 RELATIONSHIPS DURING PLANNING

a. As directed by higher authority, component commanders of the amphibious task force, at the beginning of the planning phase, report for planning purposes to the amphibious task force commander who is responsible for the preparation of the overall plan for the amphibious operation. The amphibious task force commander serves as the coordinating authority for the conduct of planning. During

planning, matters on which the amphibious task force commander and the landing force commander and commanders of other forces are unable to agree are referred to their common superior for decision.

b. Since immediate responsibility for the conduct of landing force operations ashore vests in the landing force commander, the planning and execution of the landing and assault are primarily his concern. Participation of other components in the assault consists generally in providing support for the landing force. This involves the analysis of landing force proposals to determine their feasibility from the standpoint of the remainder of the amphibious task force. The impracticability of providing necessary support is a valid reason for non-concurrence in a plan or a proposed course of action.

270 COMMAND DURING OPERATIONS

a. The amphibious task force commander, upon the commencement of operations, assumes full responsibility for the entire force and for the operation, and is vested with the commensurate command authority to ensure success of the operation. The specific means through which the amphibious task force commander exercises this authority is treated in relation to those aspects of the amphibious operation discussed in this and subsequent chapters.

b. The amphibious task force commander exercises his command authority through the commanders of his task organization. The latter, in turn, exercise their authority through their own chains of command.

c. The amphibious task force commander will exercise control, as prescribed in the initiating directive, over forces not a part of the amphibious task force when such forces are operating within the amphibious objective area after the arrival of the advance force or the amphibious task force. When such forces are merely passing through the amphibious objective area, control will be exercised only to the extent of preventing or minimizing mutual interference.

d. Subject to the overall authority of the amphibious task force commander, full responsibility for the conduct of operations ashore, and for the security of all personnel and installations located within the area of operations ashore, is vested in the landing force commander.

271 REPORTING OF COMMANDERS

At the time specified by the appropriate authority, the various commanders of the components of the amphibious task force report to the amphibious task force commander for operations. In the case of the landing force, this is usually at the time of embarkation.

272 NAVAL AUTHORITY OVER LANDING FORCE UNITS

No Navy commander other than the amphibious task force commander exercises authority over, or assumes responsibility for, the operations of landing force units, except where a Navy commander below the amphibious task force level has been designated as commander of a subordinate force composed of Navy and landing force units.

273 CONSULTATION BETWEEN COMMANDERS

In the exercise of his command authority, the amphibious task force commander, to the greatest possible extent, obtains and considers the opinion of appropriate commanders, particularly in cases involving a decision requiring the exercise of professional judgment in their operational fields. However, this requirement in no way limits the command authority of the amphibious task force commander.

274 CONSULTATION BETWEEN CORRESPONDING COMMANDERS

No significant decision affecting the plans, disposition, or intentions of a corresponding commander is made without consultation with the commander concerned.

275 PERSONNEL UNDER CORRESPONDING COMMANDERS

All necessary orders from one commander affecting personnel under command of a corresponding commander are, insofar as possible, issued through the latter or the appropriate chain of command. Nothing in the foregoing is to be construed as affecting the paramount authority of a commander of a naval ship or aircraft over persons embarked therein in matters affecting the safety and good order of his ship or aircraft, or the authority of a senior officer present to act in an emergency.

276 CORRESPONDING COMMANDERS AT SUBORDINATE LEVELS

In the amphibious task force there is a specially established and limited relationship between corresponding commanders at subordinate levels, but this involves no general command authority by a commander outside his own specific command. Such specific responsibilities and commensurate authority

as are essential to the coordinate execution of each common task to be accomplished at that level must be assigned to the proper corresponding commander.

277 DISAGREEMENTS

Disagreements which cannot be reconciled are referred to higher authority.

278 ADMINISTRATIVE CONTROL

Administrative control remains with component commanders at all times.

279 DELEGATION OF COMMAND AUTHORITY TO SUBORDINATE LEVELS

a. During operations the amphibious task force commander exercises his command authority over the entire amphibious task force. A subordinate Navy commander may be delegated command authority over a corresponding landing force commander only when:

(1) Simultaneous or nearly simultaneous assaults are conducted in areas so widely separated as to preclude effective control by a single tactical commander (this condition requires the formation of two or more attack groups and corresponding landing groups).

(2) Separate operations are conducted by a detached fraction of the amphibious task force, such as the operations of an advance force with a corresponding landing force.

b. The decision to delegate command authority over landing force elements below the level of the amphibious task force is made by the amphibious task force commander during the planning phase, after consultation with the landing force commander and the commanders of other major elements. In these cases the amphibious task force commander exercises his command authority through the commander(s) of such subordinate task force/group(s). Whenever the amphibious task force commander issues to such subordinate commander an order affecting the corresponding landing force element, the landing force commander is informed and consulted prior to issuance of the order. When command authority over landing force elements has been delegated below the level of the amphibious task force commander, the relationships between such commander and his related landing force commander are substantially the same as those between the amphibious task force commander and the landing force commander. The direct chain of command of each major component commander of the amphibious task force is reestablished upon dissolution of the

subordinate task force/group, or upon the release therefrom of the fraction of his command assigned to it.

c. Command responsibilities of a subordinate commander exercising command authority over a corresponding landing force element, are terminated by the amphibious task force commander upon fulfillment of specific conditions set forth in his order.

280 TRANSFER OF CONTROL OF FUNCTIONS

As conditions warrant and as coordination agencies are established ashore, the amphibious task force commander delegates to the landing force commander the responsibility for control of air, gunfire and missile support, and where required, responsibility for direction of all or part of the air defense task.



PART II

AMPHIBIOUS PLANNING

Chapter

- 3 The Approach to Planning**
- 4 Basic Decisions**
- 5 Subsidiary Landings**
- 6 Intelligence Planning**
- 7 Supporting Arms Planning**
- 8 Nuclear Weapons Planning**
- 9 Communications Planning**
- 10 Logistic Planning**
- 11 Ship-to-Shore Movement Planning**



CHAPTER 3

THE APPROACH TO PLANNING

CONTENTS

300	THE SCOPE OF PLANNING
301	Basic Planning Considerations
310	CONCURRENT PLANNING
320	PLANNING BY PARALLEL CHAINS OF COMMAND
321	Detailed Planning
322	Early Designation of Commanders and Assembly of Staffs
323	Collection of Information and Dissemination of Intelligence
324	Dissemination of Planning Data
325	Security in Planning
326	The Time Factor in Planning
327	Alternate Plans
328	Atomic, Biological, and Chemical Weapons
330	PLANNING PROCEDURES
331	Planning Directive
332	Planning Program
333	Planning Memoranda
334	Distribution of Drafts

CHAPTER 3

THE APPROACH TO PLANNING

300 THE SCOPE OF PLANNING

a. The planning phase of the operation is treated in Part II. This treatment is generally restricted to delineation of responsibility, matters of mutual interest and problems peculiar to amphibious planning. Within such scope, this part contains planning information of a general nature applicable to the operation as a whole.

b. Detailed information specifically applicable to each of the other phases, which affects planning, is found in Part III, the chapters devoted to the several phases of the operation.

301 BASIC PLANNING CONSIDERATIONS

a. While every operation requires careful and detailed preparation the amphibious operation is complicated by the need to coordinate in detail the actions of all forces involved, the complexity of logistic support activities, the need for precise timing in air, naval gunfire and artillery fire support, the need for effective command relationships, and the requirements of other operational factors peculiar to the operation.

b. Planning for the amphibious operation is a continuous process from receipt of the initiating directive to the amphibious task force commander, described in Chapter 2, to termination of the operation. Amphibious planning procedures are distinguished by the necessity for concurrent, parallel and detailed planning by all participating forces.

c. The fact that the opposing forces are not initially in physical contact increases greatly the scope of unforeseen contingencies which may confront the attacking forces. No preconceived directive, however detailed and carefully prepared, can possibly provide for every eventuality. The plans, therefore, must be designed with a maximum of flexibility so that the exigencies of combat can be met, and the most effective and economical use can be made of the forces assigned.

d. Planning for the amphibious operation is cyclical in nature, since it comprises a series of analyses and judgments of operational situations, each stemming from those that have preceded.

e. Planning for a specific operation is usually related to previous, current, and contemplated

operations. For this reason, particular care must be taken to ensure that adequate instructions are issued to prevent mutual interference.

f. The development of the concept of landing force operations ashore must precede detailed planning for surface and air operations to support the assault. The concept for operations ashore must be such that the operation can be supported reasonably by the surface and air elements. The concept therefore, must be examined by all commanders concerned to determine its feasibility in this respect. It must be concurred in by the amphibious task force commander prior to commencement of detailed planning. It is imperative, since other planning is based on it, that the landing force concept of operations ashore be formulated expeditiously, but all commanders who provide support for the assault must be prepared to alter and accommodate their supporting plans to changing requirements of the landing force as induced by changes in the enemy situation.

310 CONCURRENT PLANNING

The necessity for concurrent planning by two or more echelons of the same command, and also by corresponding echelons of different commands, arises from the fact that many of the problems are of mutual concern to all participants. Allocation of available amphibious shipping, landing craft, support ships, and aircraft cannot be finally determined until the plans of subordinate elements of the landing force are sufficiently advanced to provide a basis for evaluating requirements. Initial planning must be originated by the subordinate commanders on the basis of preliminary information provided in concepts of operations, outline plans, warning orders, planning memoranda and decisions emanating from the amphibious task force and landing force commanders. The final decisions reached by the senior commanders are often influenced by recommendations and estimates of subordinate commanders produced during preliminary planning.

320 PLANNING BY PARALLEL CHAINS OF COMMAND

The concurrent participation by Navy forces, landing forces and supporting air components requires a close and continuous relationship in planning between corresponding echelons of command. Basic

decisions, even those falling primarily within the sphere of responsibility of an individual commander, must be reached on a basis of a common understanding of objectives and procedures, and on a free exchange of information. This close coordination in planning is essential, irrespective of command level. At the higher command levels, parallel planning starts with the inception of the operation. At the lower levels, it usually cannot begin until basic decisions are announced by the higher levels of command. Parallel planning begins when the landing force commander reports to the amphibious task force commander at the inception of the planning phase. Commanders other than the landing force commander may be ordered to report to the amphibious task force commander for planning.

321 DETAILED PLANNING

The nature of the amphibious assault necessitates detailed planning at all command levels. In many cases this includes command decisions which restrict the degree of freedom of action and authority normally allowed subordinate commanders in the performance of their assigned tasks.

322 EARLY DESIGNATION OF COMMANDERS AND ASSEMBLY OF STAFFS

To expedite the preparation of plans within the amphibious task force, all major commanders, particularly the amphibious task force commander and the landing force commander should be designated as soon as the decision has been reached to conduct an amphibious operation. Commanders at the next echelon below the amphibious task force/landing force level of command must receive fragmentary planning instructions as early as practicable. Planning can be facilitated by the assembly of these next lower echelon commanders, with their staffs, in the same locality for coordinated planning.

323 COLLECTION OF INFORMATION AND DISSEMINATION OF INTELLIGENCE

a. Current and adequate intelligence is a prerequisite to sound amphibious planning. Therefore, prompt initiation of the collection of essential information is necessary for the valid and timely development of required intelligence.

b. Collection of the extensive and detailed information needed for planning an amphibious operation is complicated by some or all of the following factors:

(1) The distance to the objective area is often great.

(2) The amphibious task force is not in contact with the enemy.

(3) Many of the available information—collecting agencies are not part of the amphibious task force.

(4) The necessity for deception to avoid revealing the time and place of landing may require dispersion of effort by collecting agencies.

(5) A relatively long period of time may elapse between the start of planning and the execution of the landings. During this time the characteristics of the objective area and the enemy situation may undergo many changes.

c. When assigned forces are widely dispersed, both during planning and while en route to the objective area, timely dissemination of intelligence becomes a problem for which special measures must be provided.

324 DISSEMINATION OF PLANNING DATA

In amphibious planning, decisions by a commander at one level may affect the plans of other commanders on the same or other levels. In order to keep all commanders and staffs fully informed during the planning phase, there must be early and continuous dissemination of planning data by each commander to his senior, subordinate and corresponding echelon commanders. The early exchange of liaison officers is most desirable.

325 SECURITY IN PLANNING

Security in planning is a responsibility of all echelons of command. The assembly of corresponding staffs, the conduct of rehearsals and the concentration of forces, all tend to disclose the nature of projected operations and make concealment difficult.

326 THE TIME FACTOR IN PLANNING

The time necessary for planning an amphibious operation depends on many variable factors, including the number, diversity and physical separation of units involved, the magnitude and complexity of the operation, as well as the skill of the involved forces in the conduct of amphibious operations. The time required for amphibious planning can therefore in itself be regarded as a planning factor. The time lapse between initiation of amphibious planning and execution precludes assumption of exact logistic, operational and intelligence situations on the day of attack. This problem, inherent in amphibious operations, will be minimized by the creation of standing instructions, by both Navy and landing forces, covering those aspects of the landing attack

which respond to such treatment. It can be further diminished by continuous planning and by flexibility of the plans.

327 ALTERNATE PLANS

Alternate plans, considering the possibilities of loss, delay or changes as to time and place of landing, are necessary. As an additional means of maintaining flexibility, the decision as to which specific plan will be employed may be deferred until a short time before the selected hour of landing.

328 NUCLEAR, BIOLOGICAL, AND CHEMICAL WEAPONS

Whether from offensive or defensive considerations, or both, the probable effect of nuclear, biological and chemical weapons must be fully reflected in every related aspect of the plans—particularly in the scheme of maneuver ashore, the ship-to-shore movement and in logistic support requirements. See Chapters 10 and 11.

330 PLANNING PROCEDURES

The basic procedures employed in planning for an amphibious operation are amplified in the paragraphs that follow.

331 PLANNING DIRECTIVE

Following receipt of the initiating directive, the amphibious task force commander issues a planning

directive to ensure that interdependent plans will be coordinated, planning completed in the time allowed, and important aspects not overlooked. The planning directive specifies the principal plans to be prepared, and sets a deadline for the completion of each major step in the planning process for the amphibious task force headquarters and major forces assigned.

332 PLANNING PROGRAM

Using the amphibious task force planning directive as a guide, each commander prepares a planning program which contains the schedule of planning events for his force.

333 PLANNING MEMORANDA

As fragmentary information and instructions are received, and in advance of the preparation of formal plans, commanders issue planning memoranda to ensure that subordinate commanders are in possession of all available details which will affect their own planning.

334 DISTRIBUTION OF DRAFTS

Drafts of operation plans and orders, or portions thereof (such as annexes and appendices), should be distributed to other commanders, as appropriate, in order to keep them abreast of current planning for the operation.



CHAPTER 4

BASIC DECISIONS

CONTENTS

400 INTRODUCTION

410 DETERMINATION OF OBJECTIVES

420 DETERMINATION OF BEACHHEADS AND LANDING AREAS

421 Designation of Landing Sites

422 Determination of Beachheads

423 Selection of the Landing Areas

430 LANDING FORCE CONCEPT OF OPERATIONS ASHORE

440 SELECTION OF LANDING BEACHES

450 SELECTION OF HELICOPTER LANDING ZONES

**460 SELECTION OF FIXED-WING AIRCRAFT LANDING ZONES AND
DROP ZONES FOR AIRBORNE AND AIR-TRANSPORTED OPERATIONS**

470 SELECTION OF THE TENTATIVE DATE AND HOUR OF LANDING

480 DETAILED PLANNING

CHAPTER 4

BASIC DECISIONS

400 INTRODUCTION

Basic decisions, as set forth herein, are those decisions which must be made at the highest level within an amphibious task force before detailed planning for an amphibious operation can proceed. Since the factors upon which these decisions must be based are interrelated, and since the decisions based thereon will have some effect on every element of the amphibious task force, each factor must be considered from the viewpoint of all participants. This chapter deals with these basic decisions, delineates the participation of the various commanders in the making of these decisions and discusses considerations affecting them.

410 DETERMINATION OF OBJECTIVES

a. The mission assigned the amphibious task force in the initiating directive usually includes the designation of an area or areas to be captured within the amphibious objective area. The amphibious task force commander and the landing force commander together select a general course of action for the force as a whole designed to accomplish the amphibious task force mission. On the basis of this decision, these commanders together determine a mission for the landing force which is designed to attain the objectives of the amphibious task force. On the basis of this mission, the landing force commander formulates his concept of operations ashore (described in Section 430), including the selection of terrain objectives, the capture of which will assist in the accomplishment of the mission of the amphibious task force.

b. In the event that the mission assigned the amphibious task force in the initiating directive does not include a clear designation of the area or areas to be captured, the amphibious task force commander will select such areas whose capture will accomplish the assigned mission.

420 DETERMINATION OF BEACHHEADS AND LANDING AREAS

The process of selecting beachheads and their corresponding landing areas beginning with the designations of potential landing sites, is developed in paragraphs 421, 422 and 423. Although treated separately, these factors are highly interrelated with

the concept of operations ashore and are concurrently considered by the amphibious task force commander and landing force commander in reaching these basic decisions.

421 DESIGNATION OF LANDING SITES

A landing site is a continuous segment of coast line over which troops, equipment and supplies can be landed by surface means. While of minimum length to contain at least one landing beach (see paragraph 440), a landing site is restricted in maximum length only by the extent of usable, uninterrupted coastline. The amphibious task force commander designates the potential landing sites within the objective area. He furnishes the landing force commander with pertinent information concerning these sites, the suitability of seaward approaches, and information on tides. The determination or confirmation of the characteristics of landing sites, are therefore an early intelligence requirement.

422 DETERMINATION OF BEACHHEADS

A beachhead is a designated area on a hostile shore which, when seized and held, ensures the continuous landing of troops and materiel, and provides the maneuver space required for operations ashore. The landing force commander determines possible beachheads on the basis of available landing sites and the various concepts of operations ashore under consideration. He notifies the amphibious task force commander of his selections in order that they may be incorporated in the designation of tentative landing areas.

423 SELECTION OF THE LANDING AREAS

a. The landing area is that part of the objective area within which are conducted the landing operations of an amphibious task force. It comprises the sea, air and land areas required for executing and supporting the landing and establishing the beachhead selected by the landing force commander. When the amphibious task force is composed of two or more attack groups with related landing groups, a landing area may be assigned to each attack group.

b. The landing area selected must satisfy both naval and landing force requirements. Accordingly several alternate areas may be taken under consideration in the planning phase.

SELECTION OF LANDING AREAS

FIG. 4-1

NAVAL CONSIDERATIONS

1 ABILITY OF THE NAVAL FORCES TO SUPPORT THE LANDING AND SUBSEQUENT OPERATIONS.

2 DEGREE OF SHELTER FROM UNFAVORABLE SEA AND WEATHER CONDITIONS

3 HYDROGRAPHIC FEATURES OF THE BEACH APPROACHES AS RELATED TO THE SIZE, DRAFT, MANEUVERABILITY, AND BEACHING CHARACTERISTICS OF THE ASSAULT SHIPS AND CRAFT INVOLVED

4 HYDROGRAPHIC FEATURES OF THE OFFSHORE AREAS

5 EXTENT OF MINEABLE WATERS.

6 CONDITIONS AFFECTING THE ABILITY OF THE ENEMY TO DEFEAT MINE COUNTERMEASURES

7 CONDITIONS AFFECTING THE PRACTICABILITY OF IMPROVING UNLOADING FACILITIES

8 HOSTILE CAPABILITIES AND DISPOSITIONS, PARTICULARLY THE LOCATION OF ENEMY AIRFIELDS AND COASTAL DEFENSE INSTALLATIONS

9. POSSIBILITY OF EARLY SEIZURE AND REHABILITATION OF PORT FACILITIES

LANDING FORCE CONSIDERATIONS

1 SUITABILITY OF LANDING AREA FOR ATTAINMENT OF THE FINAL GROUND OBJECTIVE

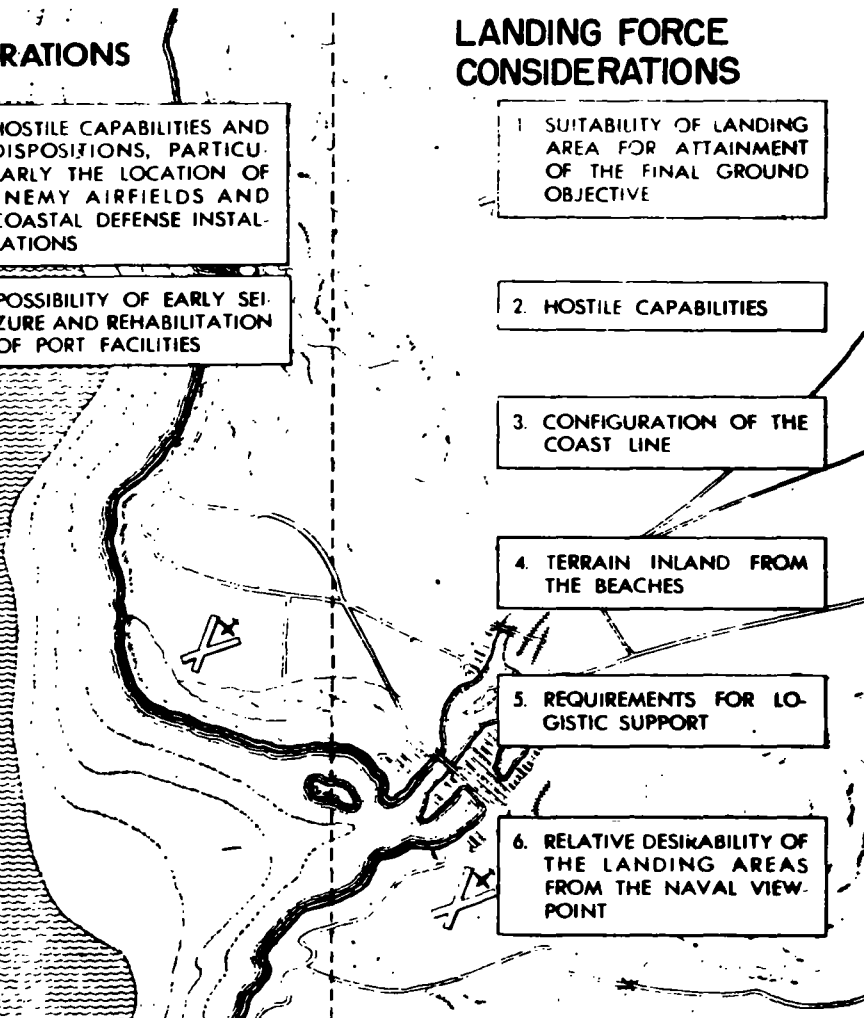
2. HOSTILE CAPABILITIES

3. CONFIGURATION OF THE COAST LINE

4. TERRAIN INLAND FROM THE BEACHES

5. REQUIREMENTS FOR LOGISTIC SUPPORT

6. RELATIVE DESIRABILITY OF THE LANDING AREAS FROM THE NAVAL VIEWPOINT



c. The amphibious task force commander delineates the sea areas and air space required for the establishment of each beachhead tentatively selected by the landing force commander. The amphibious task force commander designates the combinations of sea and beachhead areas and air space as possible landing areas, and indicates their relative desirability from a naval viewpoint. This designation is made considering the factors shown in Figure 4-1.

(1) Primary and Alternate Landing Areas. The landing force commander selects primary and alternate landing areas from among those designated by the amphibious task force commander. The landing force commander maintains continuous liaison with interested commands to ensure that there is complete understanding on any restrictive considerations. The landing force commander selects those landing areas which, consistent with the ability of the surface and air forces to provide support, will best facilitate the accomplishment of the landing force mission. In determining the desirability of landing areas from the viewpoint of the landing force, factors shown in Figure 4-1 are considered.

(2) Decision. The landing force commander presents his final selections to the amphibious task force commander for his concurrence in the light of his ability to support operations in the selected areas with the forces assigned.

430 LANDING FORCE CONCEPT OF OPERATIONS ASHORE

a. The landing force commander's concept of operations ashore is a written and graphic presentation, in broad outline, of his intent with regard to the operation. It includes the formation for landing, the maneuvers for capture of the beachhead(s) and the principal landing force objectives. The landing force commander formulates alternate concepts for operations ashore, including plans for any subsidiary operations, and presents them to the amphibious task force commander. This presentation of the landing force concepts to the amphibious task force commander allows the latter to determine if they can be supported by the forces available.

b. The principal considerations in the formulation of the concept of operations ashore from the viewpoint of the landing force are shown in Figure 4-2.

c. Naval considerations affecting the formulation of the concept of operations ashore are those

pertaining to the capabilities for transporting, protecting and landing the landing force, and for supporting its operations during and after the landing.

440 SELECTION OF LANDING BEACHES

a. A landing beach is that portion of usable coastline usually required for the assault landing of a battalion landing team or similar unit. However, it may also be that portion of a shore line constituting a tactical locality, such as the shore of a bay, over which a force smaller than a battalion landing team may be landed.

b. The landing force commander selects specific landing beaches from available landing sites within the selected landing areas. The amphibious task force commander reviews these selections in the light of the naval considerations mentioned in Section 430. When the amphibious task force is composed of two or more attack groups with related landing groups, a landing area may be selected for each attack group. In this case each landing group commander selects his landing beaches from within the assigned area.

c. The principal factors in the selection of landing beaches, in addition to those previously described for the selection of landing areas, are:

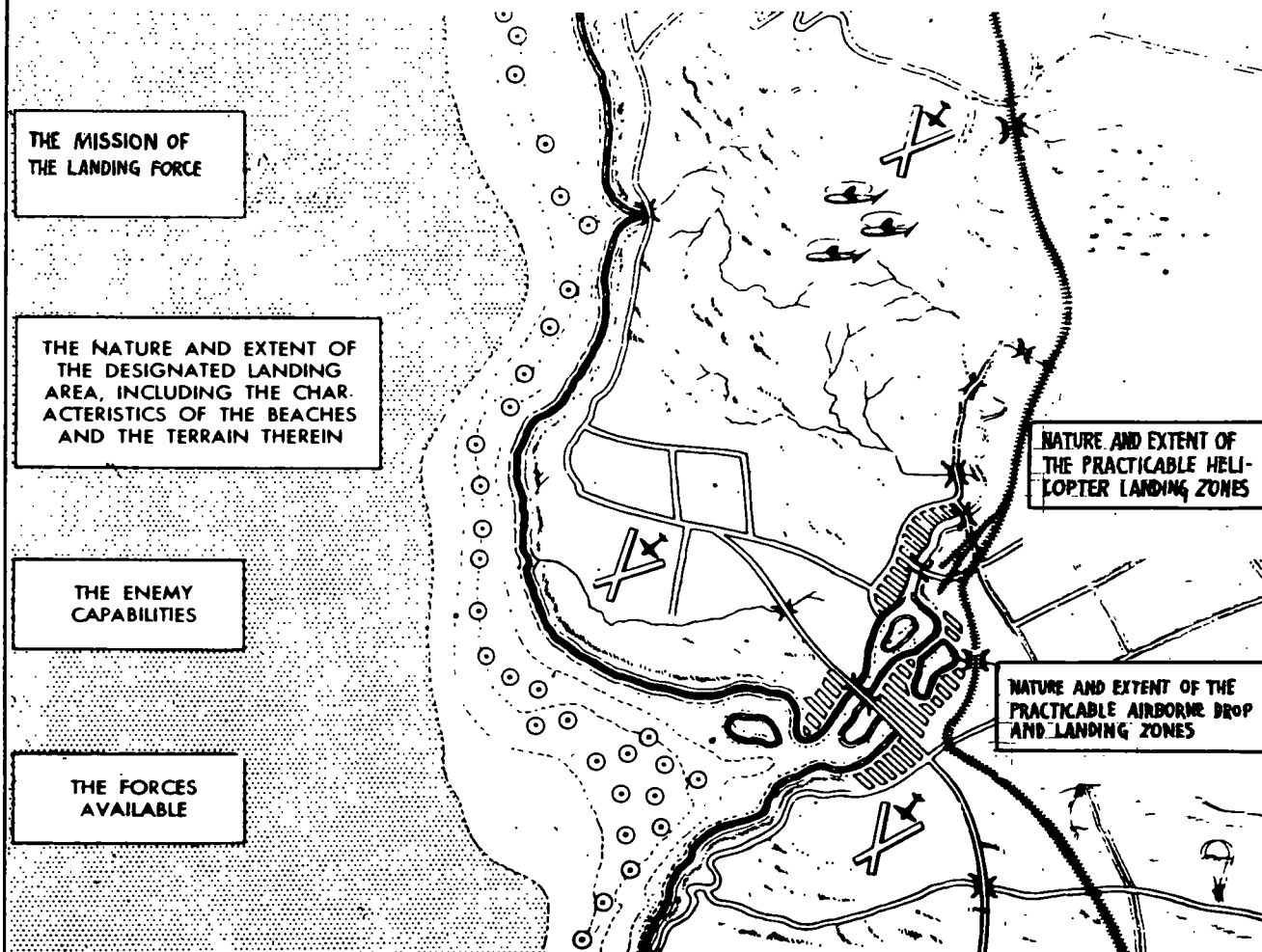
- (1) The landing force concept of operations ashore.
- (2) Capacity for landing supplies and equipment.
- (3) Suitability for beaching landing ships, landing craft and amphibian vehicles.
- (4) Beach trafficability.
- (5) Suitability of offshore approaches.
- (6) Number, location and suitability of beach support areas and beach exits.
- (7) Location, type and density of beach obstacles, including underwater obstacles.
- (8) Nature of the terrain immediately inland from the beaches.
- (9) Suitability of communications facilities, including roads, railroads and waterways.
- (10) Suitability of the beach from the standpoints of expected weather and tidal conditions.

450 SELECTION OF HELICOPTER LANDING ZONES

a. The landing force commander selects the helicopter landing zones and advises the amphibious task force commander. In reviewing these

FACTORS IN FORMULATION OF CONCEPT OF OPERATIONS ASHORE

FIG. 4-2



selections, the amphibious task force commander considers the ability of his other forces to support the proposed assault landings therein. When the amphibious task force is composed of two or more attack groups with related landing groups, the task of conducting the helicopter-borne assault operations is usually assigned to the commander(s) of one or more of the attack groups.

b. The principal factors in the selection of helicopter landing zones are:

(1) The landing force concept of operations ashore.

(2) Enemy capabilities and dispositions, particularly the location, type and density of enemy antiaircraft installations.

(3) Nature of the terrain over which the helicopter landed forces contemplate operations after landing.

(4) Requirements for logistic support.

(5) Requirements for air, naval gunfire and artillery fire support.

(6) Available helicopter routes to and from the landing zone, and restrictive effects on the employment of air, naval gunfire and artillery fire support of other forces.

460 SELECTION OF FIXED-WING AIRCRAFT LANDING ZONES AND DROP ZONES FOR AIRBORNE AND AIR-TRANSPORTED OPERATIONS

When airborne or air-transported forces are employed in amphibious operations, the landing force commander together with the airborne troops commander and the air commanders involved, selects the drop and landing zones. The amphibious task

force commander reviews them to determine his ability to support the operations in the selected zones with forces at his disposal.

470 SELECTION OF THE TENTATIVE DATE AND HOUR OF LANDING

a. The amphibious task force commander, after consultation with the landing force commander selects the tentative date and hour of landing. During the planning, tentative dates and hours are promulgated as early as possible.

b. The principal factors in the selection of the tentative date and hour for landing are shown in Figure 4-3.

480 DETAILED PLANNING.

When the amphibious task force commander has determined that he can support the preferred landing force concept of operations ashore, detailed planning begins. For the landing force commander, this planning includes formulation of the detailed scheme of maneuver ashore and the other plans which support it; that is, the plan of supporting fires and the ship-to-shore movement plan. Plans for the naval forces provide for transporting, protecting, landing and supporting the landing force. During detailed planning, the adequacy of the forces made available for the operation is constantly reexamined. If additional forces are required, they are requested of higher authority through appropriate channels.

PRINCIPAL FACTORS IN THE SELECTION OF THE TENTATIVE

FIG. 4-3

DATE FOR LANDING ...

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

- AVAILABILITY OF FORCES
- READINESS OF FORCES
- PRESENT AND PROJECTED ENEMY SITUATION
- SEASONAL CONDITIONS IN THE AREA UNDER CONSIDERATION
- LOCAL CONDITIONS OF WEATHER, TIDE, CURRENT, PHASE OF MOON
(DURATION OF DARKNESS AND DAYLIGHT)
- DESIGNATION OF LIMITING DATES BY A HIGHER AUTHORITY
- COORDINATION WITH PRELIMINARY OPERATIONS

HOUR FOR LANDING...



- KNOWN ENEMY ROUTINE
- DURATION OF DAYLIGHT
- NEED FOR TACTICAL SURPRISE
- CONCEPT OF OPERATIONS ASHORE OF THE LANDING FORCE
- FAVORABLE CONDITIONS OF WIND, TIDE, & PHASE OF MOON
- REQUIREMENTS FOR CONDUCTING CERTAIN OPERATIONS DURING HOURS OF DARKNESS
- MOST EFFECTIVE EMPLOYMENT OF AIR AND NAVAL GUNFIRE SUPPORT

CHAPTER 5

SUBSIDIARY LANDINGS

CONTENTS

- 500 GENERAL**
- 501 Purpose of Subsidiary Landings**
- 510 CAPTURE OF SPECIFIC POSITIONS**
- 511 Denial of Areas to the Enemy**
- 512 Cover and Deception**

CHAPTER 5

SUBSIDIARY LANDINGS

500 GENERAL

An amphibious operation may require one or more subsidiary landings to be conducted outside the main landing area to support the main operation. These landings may be conducted before, during or after the main landing. If made before, the effect on the main effort in terms of possible loss of surprise should be fully considered. Subsidiary landings must be planned and executed by commanders with the same precision as the main landing. Diversion of forces to effect subsidiary landings is justified only when such employment will be of greater anticipated value than commitment to the main landing. Forces employed in subsidiary landings which precede the main landing can, in some situations, be re-embarked and employed as reserves for the main landing. These operations may be conducted by the advance force concurrently with preliminary bombardment and underwater demolition tasks, or with the full support of the entire amphibious task force.

501 PURPOSES OF SUBSIDIARY LANDINGS

a. Subsidiary landings may be executed by forces landed by landing ships or craft, assault seaplane, helicopter, submarine or transport aircraft to accomplish one or all of the following specific purposes:

- (1) Capture a specific position for use in support of the main landing.
- (2) Capture an area in order to deny its use to enemy in opposing the main landing.
- (3) Through deception, to induce a hostile reaction which will favor the main landing.

b. These specific purposes are further described in the following articles.

510 CAPTURE OF SPECIFIC POSITIONS

a. Artillery, Missile, and Rocket Positions. Islands or mainland areas adjacent to the main landing area may be captured to be used as positions from which artillery, missiles or rockets can support the main landing.

b. Early Logistical Support Positions. Islands or adjacent mainland areas may be seized to establish initial logistical support positions for the landing force.

c. Airfields or Airfield Sites. Enemy airfields or airfield sites suitable for rapid conversion to provide facilities for the use of aviation operating in support of the main landing may be captured by one or more subsidiary landings.

d. Air Warning and Control Installations. Sites to establish air warning and air control systems for protection of the amphibious task force during the main landing from enemy air and missile action may provide objectives for subsidiary landings.

e. Safe Anchorages or Temporary Advanced Naval Base. Protected anchorages or sites for temporary advanced naval bases may be seized in order to provide logistical facilities to support the main landing.

511 DENIAL OF AREAS TO THE ENEMY

Hostile missile, rocket, coast defense or other installations may be emplaced on outlying positions such as promontories or islands which permit the enemy to interdict the approaches to the landing area, or to interfere with the ship-to-shore movement. The success of the main landings may depend upon the capture of such positions prior to, or concurrently with the main landing.

512 COVER AND DECEPTION

Subsidiary landings may be conducted for the purpose of diverting hostile attention and strength from the main landing. Although cover and deception plans to be executed by forces not a part of the amphibious task force are normally prepared by higher authority, the amphibious task force commander may recommend that cover and deception by such forces be carried out in support of his operations. Raids and demonstrations may be conducted for the same purpose—deception, and are treated in Chapters 18 and 19.



4



CHAPTER 6

INTELLIGENCE PLANNING

CONTENTS

600	PLANNING REQUIREMENTS AND RESPONSIBILITIES
601	The Amphibious Task Force Commander
602	The Landing Force Commander
603	Other Force Commanders
610	AGENCIES AND SOURCES
620	COLLECTION OF INFORMATION
630	THE INTELLIGENCE ESTIMATE
640	DISSEMINATION OF INTELLIGENCE
650	SECURITY AND COUNTERINTELLIGENCE
660	THE INTELLIGENCE ANNEX

CHAPTER 6

INTELLIGENCE PLANNING

600 PLANNING REQUIREMENTS AND RESPONSIBILITIES

a. Intelligence planning for an amphibious operation is governed by the specialized intelligence that major force commanders need:

- (1) to arrive at the basic decisions noted in Chapter 4,
- (2) to conduct subsequent planning,
- (3) to execute the operation.

It is divided into three distinct phases: (1) the collection, evaluation and dissemination of that intelligence required for the development of the plans for the operation; (2) the preparation of the intelligence annex to the operation plan or order; and (3) the preparation of intelligence plans, estimates, and summaries during the operation.

b. During the planning phase, the amphibious task force commander follows a process that involves the preparation of his estimate of the situation, by which he arrives at his decision as to what shall be done, as well as when, where, how and why. This finds expression in the operation plan. Intelligence is essential at every step in this process.

c. Early collection and dissemination of intelligence to meet landing force requirements are particularly important since planning for the overall operation stems from the landing force scheme of maneuver ashore. This, in turn, derives from estimates and decisions based primarily on intelligence of the enemy and the area of operations.

d. The importance of potential nuclear targets requires that during the planning phase the amphibious task force commander coordinate in detail the collection effort to ensure integration of effort, expeditious collection, rapid processing, and prompt dissemination of intelligence.

601 THE AMPHIBIOUS TASK FORCE COMMANDER

a. The amphibious task force commander is responsible, during planning, for:

- (1) Determination of intelligence requirements for planning by the naval forces, review of intelligence requirements of the landing force and other forces, and consolidation into intelligence requirements for the amphibious task force as a whole.

(2) Collection and processing of information and dissemination of intelligence to major elements of the amphibious task force in accordance with special requirements of each.

(3) Acquisition and distribution of maps, charts, photographs, and special intelligence materials.

(4) Preparation of intelligence estimates affecting the forces as a whole.

(5) Preparation of intelligence studies which relate to the mission and area of operations.

(6) Establishment of liaison with operational intelligence agencies which are not part of the amphibious task force, including area and departmental agencies as necessary.

(7) Initiation of requests and directives for the collection of information by reconnaissance, observation, and other operating agencies.

(8) Security and counterintelligence measures, in addition to those specified by higher authority.

(9) Preparation and distribution of an intelligence annex to the amphibious task force operation plan.

(10) Establishment of a target information center.

602 THE LANDING FORCE COMMANDER

a. The landing force commander is responsible, during planning, for:

(1) Determination of intelligence requirements for planning by the landing force and making these requirements known to the amphibious task force commander.

(2) Collection and processing of information and dissemination of intelligence to the landing force.

(3) Establishing liaison with intelligence agencies of the amphibious task force and with area intelligence agencies, in cooperation with the amphibious task force commander to assist in the collection of information of primary interest to the landing force.

(4) Dissemination of maps, charts, photographs, and special intelligence materials to troop units.

(5) Preparation and distribution of an intelligence annex to the landing force operation plan.

603 OTHER FORCE COMMANDERS

Other force commanders are responsible for determining and stating their intelligence requirements,

and for preparing and executing an intelligence plan compatible with the specific needs of their respective forces. Requests for intelligence peculiar to the specialized operations of these forces must be submitted by the force commanders to the amphibious task force commander.

610 AGENCIES AND SOURCES

a. The principal collection agencies and sources of information involved in the production of intelligence for the planning and execution of an amphibious operation are described below:

(1) Reconnaissance Agencies. During the planning phase, the collection of information by reconnaissance must be coordinated. Reconnaissance agencies which are normally available for the exploitation of sources of information during the planning phase are aerial, submarine, surface, and ground reconnaissance elements, underwater demolition teams and landing force reconnaissance patrols. Continuous liaison is therefore maintained among appropriate headquarters for the purpose of exploiting all sources which may disclose information pertinent to the production of intelligence to support the planning and execution of the amphibious operations. As required, requests for specific information are submitted to departmental and national agencies.

(2) Sources. All sources of information which may be of intelligence value are exploited by the amphibious task force. Among these sources are former residents and visitors to the objective area, commercial and industrial studies of the objective area prepared by civilian businesses, captured enemy military personnel and documents, film and brochure travelogues of the objective area, strategic studies of the enemy order of battle and the objective area available from strategic intelligence agencies, air and surface photography, hydrographic charts, technical intelligence reports, and weather and climate forecasts and studies.

620 COLLECTION OF INFORMATION

a. The amphibious task force commander directs and coordinates the collection and the assembly of intelligence material for the amphibious task force.

b. The means and techniques for collecting information are affected by the factors listed in Article 323.

630 THE INTELLIGENCE ESTIMATE

The amphibious task force commander is responsible for maintaining a continuing intel-

ligence estimate. When practicable, a preliminary formal estimate and other special reports are made available to the principal commanders of the amphibious task force. The full formal intelligence estimate may be an appendix to the intelligence annex of the amphibious task force operation plan, or it may be distributed separately. Other commanders also maintain continuing intelligence estimates.

640 DISSEMINATION OF INTELLIGENCE

a. Dissemination is accomplished at each command level of the amphibious task force, in accordance with requirements determined during the planning phase. A distribution plan is prepared, listing the intelligence aids to be promulgated, the commanders who are to receive them, methods of delivery, number of copies, and delivery dates.

b. The scope, contents, time of submission, method of transmission, and responsibility for preparation of intelligence reports and summaries are determined by the amphibious task force commander as early as possible during the planning phase. Each command must be afforded the means and opportunity to prepare the reports and summaries required for its own purposes, using the information available within the amphibious task force. One of the basic requirements in amphibious planning is a complete exchange of information and intelligence between commands and a mutual understanding of conclusions reached. After the planning phase has ended, additional intelligence reports and summaries are prepared and distributed by the amphibious task force commander and subordinate commanders as required.

650 SECURITY AND COUNTERINTELLIGENCE

a. The amphibious task force commander prescribes the special security and counter-intelligence measures to be taken during planning and preparation for the operation. Other commanders issue necessary directives to, and supervise the activities of, their forces. Special measures may include:

- (1) Establishment of secure planning areas.
- (2) Use of code names and symbols.
- (3) Classification of material used in planning.
- (4) Restrictions on dissemination of information and completed plans.
- (5) Restrictions on employment of communications.
- (6) Cover and deception plans.
- (7) Measures for handling civilians.
- (8) Armed Forces censorship.
- (9) Control of accredited correspondents to include field press censorship.

(10) Measures to counter subversion within and espionage directed against the amphibious task force.

(11) Security of classified documents and material

660 THE INTELLIGENCE ANNEX

Intelligence planning culminates in the preparation of the intelligence portions of the operation plans. Principal among these is the intelligence annex

which disseminates intelligence necessary for the conduct of initial operations. It has the additional function of providing instruction to subordinate commanders regarding intelligence matters, especially the collection of information. Preparation of the intelligence annex demands continuous cooperation between all echelons of command and between corresponding commands. Drafts of the intelligence annex should normally be distributed to other commanders in advance of the operation plan for use as planning guides.



CHAPTER 7

SUPPORTING ARMS PLANNING

700 REQUIREMENTS

710 RESPONSIBILITIES OF COMMANDERS

720 FIRE SUPPORT COORDINATION

721 Fire Support Planning Responsibilities

722 Coordinating Agencies

723 Attack Group Commanders

730 AIR SUPPORT PLANNING

731 Basic Elements of Air Support Planning

732 Air Support Planning Responsibilities of the Amphibious Task Force Commander

733 Air Support Planning Responsibilities of the Landing Force Commander

734 Sequence of Air Support Planning

735 Control of Air Operations

736 Content of Air Support Plans

740 NAVAL GUNFIRE PLANNING

741 General Naval Gunfire Requirements

742 Naval Gunfire Planning Responsibilities

743 The Sequence of Naval Gunfire Planning

744 Pre-D-Day Naval Gunfire Plans

745 D-Day Naval Gunfire Plans

746 Post-D-Day Naval Gunfire Plan

747 Employment Techniques

748 Provision for Control of Naval Gunfire

749 Conduct of Fire

750 FIELD ARTILLERY PLANNING

751 Plans for Landing of Field Artillery

752 Field Artillery Air Observation

753 Antiaircraft Artillery

754 Antimechanized Defense Planning

SUPPORTING ARMS PLANNING

700 REQUIREMENTS

a. Air, naval gunfire, and artillery support normally is required in amphibious operations. Plans for employment of guided missiles and nuclear weapons are integrated into the appropriate element of plans for these supporting arms. Accordingly, in this and other chapters the terms air, naval gunfire, and artillery support include the delivery of conventional and nuclear weapons projected from airborne, waterborne, and ground based platforms respectively, utilizing all appropriate launching systems.

(1) Naval Requirements. Naval operations in the objective area (such as beach reconnaissance, hydrographic survey, removal of beach and underwater obstacles, and minesweeping) normally require fire support by ships as well as by air and, on occasion, by artillery. In addition, a definite allocation of aircraft and suitable type ships must be made for the maintenance of antisubmarine screens, anti-smallboat screens, radar and other type picket ships, and combat air patrols for the protection of the task force from hostile air, submarine, or surface attack.

(2) Landing Force Requirements. The landing force must be supported by naval gunfire and aircraft operations in attack of targets on shore before, during, and after the initial landing assault. Fires are delivered to destroy or neutralize defenses capable of opposing the landing and subsequent operations ashore. Until field artillery is landed and is ready to fulfill requests for fire support, support normally rendered by artillery must be fulfilled by naval gunfire and aircraft, insofar as it is possible to do so.

(3) Interrelationship of Requirements. Since the availability and contemplated employment of one supporting arm influences the requirements for either or both of the other supporting arms, the fire support requirements of all elements of the amphibious task force must be considered in determining the total requirements for naval gunfire, aircraft, and artillery.

710 RESPONSIBILITIES OF COMMANDERS

a. Commanders who may require fire support should have a clear appreciation of the fire support characteristics, capabilities, and limitations

of the ships, aircraft, and artillery which deliver fire support. The tasks involved in planning fire support and the associated responsibilities of the commanders concerned are:

(1) Selection of Targets. Target selection is the prerogative of the commander being supported.

(2) Determination of Target Priority. A general policy as to the priority of targets to be attacked by naval gunfire and air is announced by the amphibious task force commander. Usually, targets are grouped according to the priorities shown in Figure 7-1. Among those targets which are of primary concern to the troops, the landing force commander establishes target priorities.

(3) Selection of Means. The selection and allocation of ships and aircraft to deliver fire support is a function of the amphibious task force commander or his designated representative. The selection and allocation of artillery units to deliver the required fires is a function of the landing force commander. The selections and allocations by both commanders are interdependent, and constant liaison and exchange of information on the subject are essential.

(4) Timing of Missions. The determination of the time when fire support missions are to be executed is a function of the commander of the supported unit. Plans for this aspect of fire support must conform to his announced requirements as far as practicable.

(5) Adjustment of Fire. When the troop commander possesses adequate facilities, the conduct and adjustment of naval gunfire are troop functions. When he lacks adequate facilities for the conduct of fire, the supported troop commander designates targets and timing of fires, and recommends type and amount of ammunition to be used. Adjustment is accomplished by the supporting agencies.

720 FIRE SUPPORT COORDINATION

a. Plans for the fires of aircraft, naval gunfire, and artillery must be coordinated to ensure that those arms are economically employed with maximum effectiveness and the requisite degree of safety. Such coordination in planning is achieved through application of the following principles:

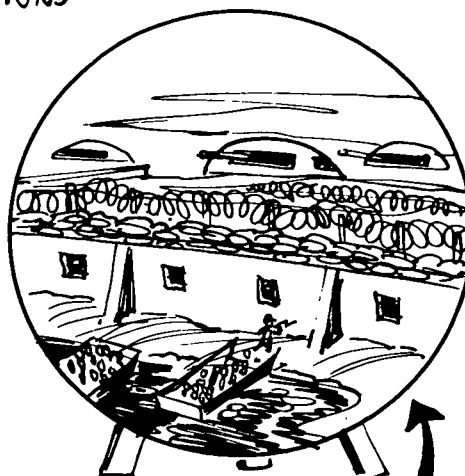
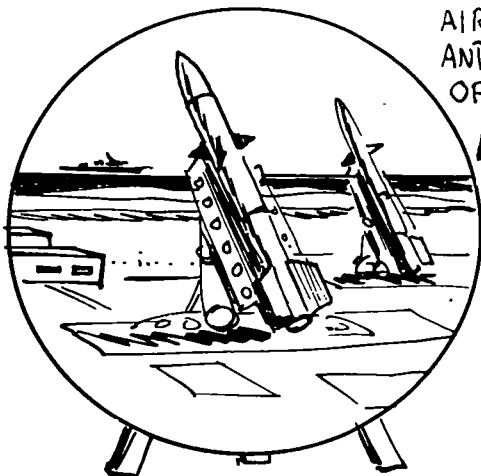
(1) Unnecessary duplication of missions must be avoided.

(2) Executed missions must not unduly endanger friendly forces.

TARGET PRIORITIES

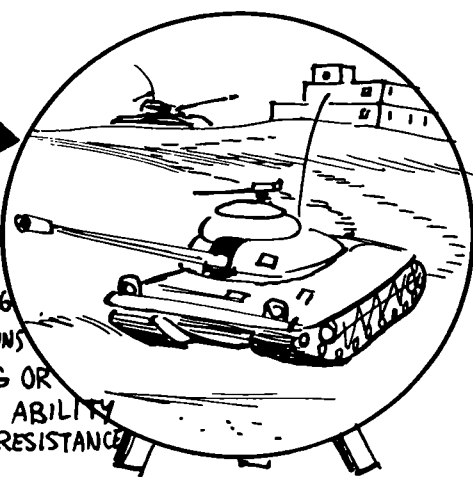
FIG. 7-1

CLASS A THREATEN SHIPS,
AIRCRAFT, MINESWEEPING,
AND UNDERWATER DEMOLITION
OPERATIONS

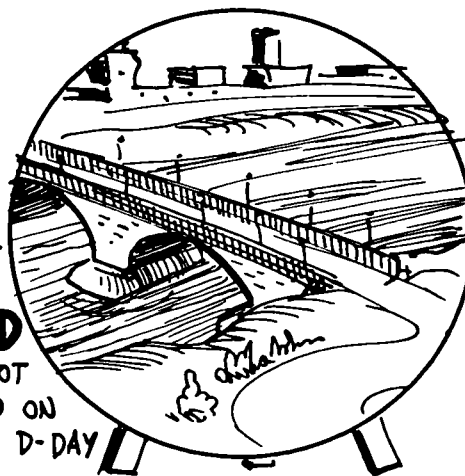


CLASS B
THREATEN ASSAULT FORCES IN THE
SHIP-TO-SHORE MOVEMENT AND
ASSAULT OF THE BEACHES

CLASS C
THREATEN OR
OPPOSE LANDING
FORCE OPERATIONS
AFTER LANDING OR
AFFECT ENEMY ABILITY
TO CONTINUE RESISTANCE



CLASS D
SHOULD NOT
BE FIRED ON
PRIOR TO D-DAY



CLASS E
MUST NOT BE DESTROYED,
EXCEPT ON DIRECT ORDERS



(3) Interference by one means of support with the employment of another must be reduced to a minimum.

(4) Each means of support must be employed on missions best suited to its capabilities consistent with the situation, time available, relative amounts of ammunition on hand and difficulty of ammunition supply.

(5) Control of fires is accomplished by the lowest echelon wherein adequate personnel and facilities are available.

(6) Final coordination of fires is accomplished at the lowest echelon able to effect complete coordination of the particular mission. Fires are coordinated at each echelon to the degree to which that echelon is affected by the mission.

(7) A common system of target designation must be used by all supporting arms.

721 FIRE SUPPORT PLANNING RESPONSIBILITIES

a. The amphibious task force commander is responsible for:

(1) Coordination of the planning for the employment of all aircraft, naval gunfire, and artillery.

(2) Preparation of coordinated naval gunfire and air plans for all phases of the operation.

(3) Planning for the establishment of a supporting arms coordination center at each appropriate level in the amphibious task force upon arrival in the objective area.

b. The landing force commander is responsible for:

(1) Establishing at the beginning of the planning, at each appropriate level of the landing force, a fire support coordination center for the discharge and implementation of landing force coordination responsibilities throughout the planning phase and execution of the operation.

(2) Determining the air, naval gunfire and artillery support requirements of the landing force, and ensuring that the requirements are integrated with the planned maneuver of the troops.

(3) Coordinating the requests for artillery, naval gunfire, and air support for the landing force.

(4) Presenting coordinated requests for naval gunfire and air support to the amphibious task force commander.

(5) Preparation of artillery fire support plans.

722 COORDINATING AGENCIES

a. The Navy fire support coordinating agencies of the amphibious task force are termed Supporting Arms Coordination Centers (SACC); the landing force fire support coordination agencies are termed Fire Support Coordination Centers (FSCC) at division and

higher echelons. During the planning phase close liaison must be maintained to ensure the development of properly coordinated fire support plans.

b. The operation of these coordination agencies during the assault is covered in Chapter 16.

723 ATTACK GROUP COMMANDERS

When attack groups are formed, and where separate landing areas are designated, each attack group commander is normally assigned the responsibility for the control and coordination of supporting arms in his landing area.

730 AIR SUPPORT PLANNING

Owing to the magnitude and importance of air support operations, the planning necessary to fulfill air support requirements of the amphibious operation is extensive. Air support of the amphibious operation includes all air operations conducted in fulfilling air requirements of all forces assigned to the amphibious task force, and all such air operations must be integrated into the operation plan, whether the support is provided by air elements assigned to the amphibious task force, or by air elements which are not a part of that force.

731 BASIC ELEMENTS OF AIR SUPPORT PLANNING

a. The following are the principal considerations involved in air support planning:

(1) Centralized Control. All aircraft operating within the objective area of an amphibious operation must be under centralized control. A tactical air control system capable of providing the requisite centralized control must be organized. (See Article 735)

(2) Achievement of Local Air Superiority. Success in an amphibious operation requires a distinct margin of air superiority in the area of its operations. Because complete destruction of enemy air strength is rarely attained, all elements of the amphibious task force must be provided with continuing air defense throughout the operation.

(3) Access to Control Agencies. Plans must ensure that all landing force command levels are provided direct access to the agency exercising control of aircraft allocated to close air support. Intermediate ground command levels may countermand or modify requests of subordinates for close air support at the time the requests are made to the close support control agency.

(4) Deployment Ashore of Landing Force and Other Aircraft. Plans should provide for early seizure of bases for operating aircraft and sites

for landing force early warning and air control facilities in order to:

(a) Provide for the early deployment ashore of aviation units designated for continuing support of the landing force.

(b) Extend the radius of warning and control, and thus improve the task force air defense capabilities.

(5) Aircraft Availabilities. Initially, air support, which is preplanned in detail, must be provided by aircraft operating from carriers or available from bases within effective range of the objective area. As the facilities for operating land based aircraft increase within the objective area, aircraft operating from such facilities are utilized through the tactical air control system to fulfill an increasing amount of the total air support requirements.

732 AIR SUPPORT PLANNING RESPONSIBILITIES OF THE AMPHIBIOUS TASK FORCE COMMANDER

a. The amphibious task force commander has the following responsibilities in planning air support:

(1) Determination of Naval Requirements for Air Support. Naval requirements remain generally constant throughout the operation. Air superiority must be attained and maintained in the objective area, and the movement of enemy forces into, and within, the objective area must be curtailed or halted. There is a continuing requirement for defense against enemy air, surface, and subsurface attack.

(2) Determination of Navy Air Support Capabilities. The amphibious task force commander determines the air support capabilities of Navy air elements of the task force in terms of sorties, endurance on station, ordnance loads, and payloads.

(3) Coordination of Air Requests. The amphibious task force commander coordinates all requests for air support originating within the task force and allocation of aircraft in accordance with the capabilities previously determined. If stated requirements exceed capabilities, he makes requests for additional support to higher authority.

(4) Preparation of the Air Plan. The tactical air commander prepares an air plan for the amphibious task force commander to govern the conduct of air operations throughout all phases of the operation. It becomes the basis for the air plans of subordinate commanders.

733 AIR SUPPORT PLANNING RESPONSIBILITIES OF THE LANDING FORCE COMMANDER

a. The landing force commander has the following responsibilities in planning air operations in support of the landing force:

(1) Determination of Landing Force Air Support Requirements. He coordinates all requests for air support originating within the landing force, and submits the consolidated requirements to the amphibious task force commander.

(2) Determination of Landing Force Air Support Capabilities. He determines the air support capabilities of organic landing force aviation units in terms of sorties, on-station endurance, ordnance loads, and payloads; and submits them to the amphibious task force commander.

(3) Submission of Plans for Deployment Ashore. He submits recommendations to the amphibious task force commander for the deployment ashore of landing force and other aviation units.

(4) Preparation of an Air Plan. He prepares an air plan based on the amphibious task force air plan.

734 SEQUENCE OF AIR SUPPORT PLANNING

a. The usual sequence for planning air support is as follows:

(1) Submission of consolidated troop requirements,

(2) Determination of naval requirements.

(3) Consolidation by the amphibious task force commander of the troop and naval requirements.

(4) Determination of the combined air support capabilities of the entire task force.

(5) Computation of the number and types of aircraft, and amount and kinds of armament necessary to fulfill requirements.

(6) Request, if necessary, of additional air support means by amphibious task force commander.

(7) Adjustment of plans by the amphibious task force commander in consultation with the landing force commander, if desired additional air support means cannot be made available by higher authority.

(8) Assignment of forces and formulation of the air plan of the amphibious task force.

(9) Formulation of subordinate air plans, including the details appropriate to the issuing command level.

735 CONTROL OF AIR OPERATIONS

a. Control of air operations is exercised by various commands as the operation progresses. Plans must be made to provide each such commander with the proper facilities for control of air operations.

(1) Control of Pre-D-Day Air Operations. The advance force commander is responsible for control of pre-D-day air operations. Control is exercised through the tactical air direction center (TADC) established in the flagship of the advance force commander.

(2) Shift of Control Upon Arrival of Amphibious Task Force Commander. The amphibious task force commander assumes responsibility for control of all air operations upon arrival in the objective area. Control of all air operations is exercised through the tactical air control center (TACC). This control center is the direct representative of the amphibious task force commander, and is established in his flagship. Subordinate tactical air direction centers (TADC), as designated in advance, monitor air control circuits in readiness to assume all or a part of the duties of the TACC if required.

(3) Control by Attack Groups. When attack groups are formed for operations in widely separated landing areas, the amphibious task force commander normally assigns to each attack group commander responsibility for control of air support in his respective landing area. (See Article 723) The attack group commander exercises control through a tactical air direction center (TADC) in the attack group flagship. The over-all direction of air support, as it applies to the operation as a whole, is retained by the amphibious task force commander and exercised through the force tactical air control center (TACC).

(4) Shift of Control Responsibility to Landing Force Commander. The landing force commander establishes air control facilities ashore that parallel those of the amphibious task force commander, and of attack group commanders, when such groups are formed. The ashore control (TACC) and direction (TADC) centers initially are in a standby status monitoring all air control circuits. When ashore control facilities are complete, and upon recommendation of the landing force commander, the amphibious task force commander may pass responsibility for control of air operations to the landing force commander ashore. The passage of control may be in one or more steps; e.g., control of close air support may be passed ashore prior to control and responsibility for air defense. After passage of control ashore, the afloat control centers continue to monitor air circuits in a standby status, ready to assume control in the event of an emergency ashore.

736 CONTENT OF AIR SUPPORT PLANS

a. Plans for air support include provision for:

(1) Pre-D-Day Operations.

(a) Achievement of air superiority and conduct of air defense.

(b) Interdiction of the objective area.

(c) Destruction of enemy forces.

(d) Spotting naval gunfire

(e) Antisubmarine warfare.

(f) Search and rescue.

(g) Reconnaissance.

(h) Harassment.

(i) Propaganda.

(2) D-Day Operations.

(a) Pre-H-Hour neutralization of beaches and helicopter landing zones.

(b) Transport helicopter operations.

(c) Troop carrier operations

(d) Close air support, both on-station and on-call.

(e) On-call smoke aircraft.

(f) Air observation and spotting

(g) Operations of tactical air coordinators (Airborne).

(h) Continuation of applicable pre-D-day air support operations.

(i) Night battlefield illumination.

(j) Air delivery of supplies.

(k) Evacuation.

(l) Search and rescue.

(m) Air defense.

(3) Post-D-Day Operations. Post-D-day air support operations can only be planned in general, since requirements will depend on the troop tactical situation ashore and will thus not be fully known. Applicable pre-D-day and D-day operations are continued.

(4) Air Control and Warning. Comprehensive plans for aircraft control and air warning for the amphibious task force are prepared, including provisions for the echeloning of landing force air control organizations ashore.

(5) Air Delivery of Supplies. The basic requirements for air delivery of supplies are established by the landing force commander. Air support plans contain provisions for their delivery.

(6) Troop Carrier Operations. If the tactical plan involves the movement of troops into the combat area by air transport, the landing force commander translates the tactical plan into a general statement of aircraft requirements by type for inclusion in his comprehensive request for air support.

(7) Liaison and Observation Aircraft. Plans make provision for the early arrival of liaison and observation aircraft in the objective area. They may be flown to the area or transported in ships.

(8) Airfields for Tactical Aircraft. Rehabilitation or construction of airfields in the objective area to permit the earliest possible deployment ashore of land-based tactical aircraft organic to the amphibious task force or provided from other sources must be included in air support plans.

(9) Air Defense. Plans must provide for protection of naval and landing force units from

enemy air attack. The coordinated employment of antiaircraft batteries and defending aircraft is a continuing requirement.

740 NAVAL GUNFIRE PLANNING

Naval gunfire, with its great variety of weapons extending from light conventional armament to heavy missiles and nuclear weapons, can play a vital role in reducing enemy capacity for action and destroying enemy installations prior to D-day, in protecting and covering the assault on D-day, and in supporting the offensive action of the troops during the action ashore after D-day. As in the case of air support, the effective employment of naval gunfire requires well-coordinated planning.

741 GENERAL NAVAL GUNFIRE REQUIREMENTS

a. Planning for the effective employment of naval gunfire support must recognize the following basic requirements:

- (1) Sufficient ships and spotting aircraft assigned to accomplish the mission.
- (2) Sufficient quantities and types of munitions to maintain the required volume of fire.
- (3) Adequate sea room and suitable hydrographic conditions in the fire support area.
- (4) Maintenance of local air and naval superiority.
- (5) Positive observation of the naval gunfire target areas by one or more agencies.
- (6) Separate communication circuits between ships, troops ashore, and ground and air spotters.
- (7) Sufficient time to effect essential destructive fires.
- (8) Complete integration of the naval gunfire support with the landing force scheme of maneuver, artillery and air operations, and associated naval operations.

742 NAVAL GUNFIRE PLANNING RESPONSIBILITIES

a. The amphibious task force commander is responsible for the preparation of the over-all naval gunfire support plan, based on the support requirements presented by the landing force commander, and on the naval requirements. The planning includes the allocation of gunfire support ships and facilities. The amphibious task force commander is also responsible for the formulation of the general policy as to the priority of all types of targets to be taken under fire.

b. The landing force commander is responsible for the determination of troop requirements for naval gunfire support, including the selection of targets to be destroyed in the pre-assault operations, those

to be fired on in support of troops, and the timing of these latter fires in relation to troop operations. After determining his requirements for naval gunfire support, fire support means, and priority of targets, the landing force commander presents them to the amphibious task force commander.

c. When attack groups are formed and separate landing areas are prescribed, each attack group commander, guided by the requirements of the associated landing group commander and by the naval requirements, normally plans naval gunfire in his landing area, under the policy direction and over-all guidance of the amphibious task force commander. (See Article 723)

743 THE SEQUENCE OF NAVAL GUNFIRE PLANNING

a. Naval gunfire support plans are usually formulated in the following sequence:

- (1) Landing force over-all requirements are submitted to the amphibious task force commander.
- (2) Naval requirements are determined.
- (3) The amphibious task force commander consolidates the troop and naval requirements and, on the basis of this consolidation, determines the number of ships required to support the operation. Insofar as practicable, the troop requirements are approved and provisions for meeting them are incorporated in the final fire support plans. The amphibious task force commander may request that additional fire support ships be made available if the ships and aircraft available cannot satisfy the support requirements. If additional fire support ships cannot be made available by higher authority, the amphibious task force commander, in consultation with the landing force commander, adjusts plans accordingly.
- (4) After final allocation of fire support ships, detailed troop and naval requirements are formulated and submitted, and the detailed naval gunfire support plans are prepared.

744 PRE-D-DAY NAVAL GUNFIRE PLANS

a. The primary objective of pre-D-day naval gunfire is physical destruction of vital enemy defenses and ground installations to prepare the landing area for the assault, and destruction and/or interdiction of enemy routes of communication. The plan usually includes the following elements.

- (1) Assignment of ships to fire support areas and zones of responsibility.
- (2) Announcement of ammunition allowances and plans for replenishment.
- (3) Naval gunfire communications instructions.

- (4) Designation of targets, provision for damage assessments, and acquisition of target intelligence.
- (5) Provision for availability of spotting aircraft and reference to appropriate air support plans.
- (6) Provision for coordination with minesweeping, UDT, and air operations.
- (7) Provision for recording target information and reporting latest intelligence data to the amphibious task force commander.

745 D-DAY NAVAL GUNFIRE PLANS

a. The major purposes of the D-day naval gunfire plan are, in conjunction with other supporting arms, to provide for:

- (1) Maximum destruction consistent with time available.
- (2) Closely timed neutralization of remaining enemy defenses to cover the waterborne and helicopter-borne ship-to-shore movements, and support of the landing, deployment, and advance of troops.
- (3) Prompt and effective delivery of call fires in direct support of troop units.
- (4) Disruption of enemy systems of command, communications, and observation by destruction, neutralization, interdiction, and harassment.
- (5) Isolation of the landing area and defense against enemy counteroffensive action by massed fires on probable routes of approach.

b. Essential elements of the plan include:

- (1) Initial assignment of ships to fire support areas, zones of responsibility, and in direct and general support of specific troop units.
- (2) Location, when required, of helicopter approach and retirement lanes, and necessary coordinating instructions. These same instructions will be found in the appropriate portions of the related air support plan.
- (3) Announcement of ammunition allowances and plans for replenishment.
- (4) Naval gunfire communications instructions.
- (5) Designation of targets, target areas, deep support areas, and probable routes of approach of enemy reinforcements.
- (6) Provisions for spotting aircraft.
- (7) Instructions for massing fires of several ships.
- (8) Provisions for coordination with the ship-to-shore movement, minesweeping, underwater demolition, artillery, and air operations.

746 POST-D-DAY NAVAL GUNFIRE PLAN

a. Naval gunfire continues to support the landing after D-day by the assignment of ships for:

- (1) Call fires in direct support of troops ashore.

- (2) Close and deep fires in general support.
- (3) Delivery of fire support on the flanks of the landing area and fires against targets of opportunity.

747 EMPLOYMENT TECHNIQUES

a. Both prearranged fires and call fires are extensively employed in pre-D-day, D-day, and post-D-day naval gunfire operations. Plans for naval gunfire support of troop operations are prearranged as far as practicable but provision for call fires must also be made.

(1) **Prearranged Fire.** Fire delivered on known or suspected targets in accordance with a planned schedule either on a time or on a call basis.

(a) **Close Support.** Plans for prearranged close support fires provide for neutralization of short-range direct or indirect fire weapons which can bring fire to bear on the ship-to-shore movement, the landing beaches, landing zones, or front lines. For continuity in supporting either the initial landings or the ground operations to follow, the close support fires must be scheduled to continue until it is anticipated that troop naval gunfire spotters will be able to conduct call fires. Major considerations in planning close support fires include:

1. **Terrain--**determines the area which might contain weapons capable of delivering direct fires or short-range indirect fires on the troops as they land and advance inland, and determines masks which might interfere with shipboard observation and delivery of fires into defiladed areas.

2. **Troop safety--**provision for lifting of fires ahead of and to flanks of advancing troops at a prescribed distance determined by bursting radius of ammunition used, type of fuze, overhead or flank fire, battery dispersion, probable error, and estimated rate of troop advance.

3. **Observation of troop advance--**provides basis for modification of schedules of fires when advance is at other than planned rate.

4. **Size of target areas--**determines amount of ammunition required to obtain and maintain neutralization.

(b) **Deep Support.** Plans for prearranged deep support fires provide for neutralization of long-range weapons, defense against enemy armored attack, and interdiction fires. The major factors which must be considered in planning prearranged deep support are the availability of suitable fire support ships and the availability of spotting aircraft.

(2) **Call Fires.** Plans for providing call fires require the assignment of shore fire control parties to the infantry battalions, reconnaissance units, and provisional independent task units which will employ

naval gunfire support, and provision for air spotters, where such are required. Special staff representation is required at all higher elements of the landing force. Direct support ships are designated to provide call fires for specific troop units through their assigned shore fire control parties, while general support ships are provided to answer calls for fire from the supported unit and subordinate elements as directed.

748 PROVISION FOR CONTROL OF NAVAL GUNFIRE

a. Control of naval gunfire is exercised by, and passes to, different commands and agencies as the operation progresses. Arrangements must be made to provide each cognizant commander with proper facilities for control of naval gunfire.

(1) Pre-D-Day Bombardment. The advance force commander is responsible for control during pre-D-day bombardment. Control is normally exercised through the advance force supporting arms coordination center.

(2) Transfer of Control Responsibility Upon Arrival of Amphibious Task Force Commander. The amphibious task force commander assumes responsibility for control of naval gunfire upon arrival in the objective area. Control is exercised through the Supporting Arms Coordination Center.

(3) Attack groups. When attack groups are formed and separate landing areas are designated, the amphibious task force commander may assign to each attack group commander responsibility for control of naval gunfire in his landing area, retaining only over-all direction as it applies to the operation as a whole. (See Article 723)

(4) Shift of Responsibility for Control to Landing Force Commander. When the landing force commander establishes the necessary facilities ashore, responsibility for the control of naval gunfire may be passed to him. He is then authorized to assign naval gunfire support missions directly to the fire support ships and to supervise the execution of these missions. In this case, the amphibious task force commander (or his designated subordinate) retains responsibility for:

- (a) Allocation of available ships for fire support duties.
- (b) Ammunition resupply and logistic support of fire support ships.
- (c) Operational control of fire support ships.

749 CONDUCT OF FIRE

a. When ships are placed in direct or general support of specific landing force units, the selection of targets, the timing of fires on the targets, specifications of line of fire (when not inconsistent with

safe navigation), and the adjustment of fires are functions of the supported troop unit.

(1) A ship placed in direct support of a specific troop unit (normally a unit of battalion size) delivers call fire missions, which are conducted and adjusted by a shore fire control party or assigned air spot of the supported unit, and delivers prearranged fires as requested.

(2) A ship placed in general support of a specific troop unit (normally a unit of regimental or larger size) conducts fire missions which are directed (usually in general terms) by the naval gunfire liaison team of the supported unit. Fires delivered in general support, if observed, are adjusted by an assigned spotting agency, which may be either an air spotter, a ground spotter, or a shipboard spotter. Fire missions against targets of opportunity are conducted directly by the fire support ship as provided for in the plans. Specific fire missions may be ordered by the commander responsible for controlling naval gunfire support. For prearranged fires, these orders are issued in the form of a schedule.

750 FIELD ARTILLERY PLANNING

a. Field artillery, including field artillery rockets and missiles, is organic to the landing force. Because of its capability of providing close and continuous fire support, along with its ability to mass fires rapidly on critical points, field artillery plays a major supporting role. Plans should provide for the early landing and entry into action of the artillery units. Only those aspects of artillery which are of mutual interest to naval and landing forces are included here.

(1) Requirement for Field Artillery Support. The amount of field artillery support provided will exert a considerable influence on calculations of the over-all fire support requirements of the amphibious task force. The amount and type of artillery required to support an operation is determined by the landing force commander.

(2) Responsibility. Responsibility for planning for the employment of field artillery rests with the landing force commander. The burden of providing fire support rests initially with naval gunfire and aircraft. As an artillery capability is built up ashore, the requirements for naval gunfire and close air support may progressively decrease. Field artillery capability is built up ashore, the requirements for naval gunfire and close air support may progressively decrease. Field artillery which can be emplaced prior to the main landing may serve to reduce the D-day naval gunfire and air support requirement. Since artillery fires must be carefully integrated into the over-all fire support plan, as well as

the maneuver of the supported troop units, it is essential that the landing force artillery support plan be formulated concurrently, and in conjunction, with those for naval gunfire and air support. Interested naval echelons are kept informed of the contents of the plans.

(3) Support of Local Naval Operations. Within its range capabilities, field artillery may be able to support local naval operations such as minesweeping, minelaying, and the protection of minefields and anchorages, thereby releasing naval gunfire units for other missions.

751 PLANS FOR LANDING OF FIELD ARTILLERY

Employment of field artillery units involves the handling and transport of quantities of heavy equipment and ammunition. Because of the importance of early entry into action of these units, plans should include provisions for maximum utilization of landing ships, amphibian vehicles, landing craft, helicopters, and fixed-wing aircraft for the landing of field artillery.

752 FIELD ARTILLERY AIR OBSERVATION

To exploit fully its capability field artillery requires air observation as soon as firing units are in position. Plans should include provisions for availability of adequate spotting aircraft for this purpose, until such time as the landing force observation aircraft are able to operate in the objective area.

753 ANTI-AIRCRAFT ARTILLERY

a. Planning for air defense, including the coordination of anti-aircraft fires, is initially the responsibility of the amphibious task force commander. Anti-aircraft artillery units, which include troop anti-aircraft missile units, are employed as determined by the landing force commander, who is responsible for controlling the fires of these units in accordance with the over-all air defense plans. Only those aspects of landing force anti-aircraft artillery which are of mutual interest are mentioned here.

(1) Types and Numbers. The types and numbers of anti-aircraft artillery units required for an amphibious operation are determined by the landing force commander.

(2) Naval Operations. Anti-aircraft artillery may be used to provide anti-aircraft protection to forces afloat within range. This may free ships and support aircraft for other tasks. The extent of the enemy air threat influences the requirements for anti-aircraft artillery.

(3) Target Acquisition Radars and Target Information. Long range target acquisition radars of anti-aircraft artillery units should be phased ashore as soon as the tactical situation permits. Once ashore, these radars should be coordinated within the air defense system with the acquisition means of other forces, afloat and ashore.

(4) Integrated Control of Fire. A plan for air defense, both nuclear and non-nuclear, will be prepared. This plan will include, in light of operational factors pertaining to the particular operation, a policy with respect to the control of fires.

754 ANTI-MECHANIZED DEFENSE PLANNING

a. In view of the possible decisive effects of the employment of enemy armor against the landing force, special consideration must be given to the effective use of naval gunfire, air, and artillery in anti-mechanized operations. Planning for anti-mechanized fires is essentially a problem of coordinating the various active means. Particular emphasis must be placed on:

(1) An initial and continuously revised estimate of hostile armored capabilities;

(2) Planning measures to ensure the timely detection, location, and warning of the employment of hostile armor; and

(3) Determination of the weapons requirements of the landing force for anti-mechanized fires.

b. In the over-all integrated support plans for air, naval gunfire, and artillery, provision must be made for:

(1) Prearranged delineation of areas of responsibility for air, naval gunfire, and artillery support to combat hostile armor. Insofar as possible, the areas should correspond to, or fall within, the areas assigned for other support tasks.

(2) Concentration of fires on critical points.

(3) Rapidly massing the bulk of available fires to intercept hostile armor as the attack progresses.

(4) Specific assignment of authority to appropriate troop commanders to shift the fire of gunfire support ships from their primary assignments to repel enemy mechanized attacks.

c. When the enemy armor capability is significant, consideration should be given to the preparation of an anti-mechanized plan which provides in one plan for the coordination of all effective defensive means to block enemy armored reinforcements during the initial beachhead assault.



CHAPTER 8

NUCLEAR WEAPONS PLANNING

CONTENTS

800	EMPLOYMENT OF NUCLEAR WEAPONS
810	PLANNING RESPONSIBILITIES
820	PLANNING SEQUENCE
830	PLANNING CONSIDERATIONS
831	Supply and Resupply of Nuclear Weapons
832	Selection of Targets
833	Selection of Weapons and Delivery Means
834	Timing of Attack of Targets
840	CONTENT OF THE NUCLEAR WEAPON SUPPORT PLAN
850	DEFENSE AGAINST NUCLEAR WEAPONS
851	Responsibilities for Nuclear Defense Planning
852	Preparation of the Nuclear Defense Plan
853	Content of the Nuclear Defense Plan
854	Conduct of Nuclear Warfare Defense

NUCLEAR WEAPONS PLANNING

800 EMPLOYMENT OF NUCLEAR WEAPONS

a. Nuclear weapons employment planning is a part of the overall fire support planning discussed in Chapter 7. Nuclear firepower supplements and may, under certain circumstances, largely supplant non-nuclear firepower. The principles and procedures of fire support coordination are not changed by the introduction of nuclear weapons. However, the importance and extent of coordination are increased because of the magnitude of nuclear weapon effects. Communications doctrine, means and procedures normally used in an amphibious operation are adequate for nuclear support operations.

b. The effects of a nuclear explosion can be varied, and to some extent controlled by changes in components, by variations in methods of delivery, and by variations in height of burst. There will usually be available to the amphibious task force commander a variety of nuclear weapons, delivery systems and weapon yields which may be combined to meet the specific needs of the force.

c. The initiating directive received by the amphibious task force commander informs him of the number and type of nuclear weapons available, together with the authority for using them or restrictions placed upon their employment. The amphibious task force commander may be given complete administrative and tactical control of the weapons allocated for his use; or these weapons may be delivered by other forces but their use directed by the amphibious task force commander. If certain targets within the area of operation are to be exempt from nuclear attack, the directive defines such targets.

810 PLANNING RESPONSIBILITIES

a. Command responsibility for planning the use of nuclear weapons during amphibious operations rests primarily with the landing force commander and the amphibious task force commander.

(1) Landing Force Commander's Planning Responsibilities. The landing force commander is responsible for planning for the nuclear weapons support of troop operations ashore including the selection of the targets to be fired on and the timing of these fires in relation to troop operations. He is likewise responsible for planning for the

security, maintenance, and movement of nuclear weapons which are displaced ashore. After determining his requirements, the landing force commander presents them to the amphibious task force commander. They include:

(a) Target priority list;

(b) A detailed plan for each target to include type, number and timing of prearranged weapons desired, the desired yields, methods of delivery, ground zero, and height of burst for each; and

(c) Type and number of on-call and reserve weapons desired.

(2) Amphibious Task Force Commander's Planning Responsibilities.

(a) The amphibious task force commander is responsible for the preparation of the nuclear weapons support plan. He is also responsible for allocating the available nuclear weapons to meet the needs of all forces assigned to the amphibious task force and for establishing the level of reserve weapons.

(b) The amphibious task force commander plans for the assignment of the nuclear weapons, including their component parts, to the various ships, which then become responsible for their storage, surveillance, security, movement and, where appropriate, their delivery. In conjunction with the landing force commander, he makes plans to move nuclear weapons ashore when the tactical situation requires.

(c) The amphibious task force commander is responsible for the preparation and dissemination of signal instructions pertaining to nuclear weapons employment, to include communications codes to be used in the amphibious operation.

820 PLANNING SEQUENCE

a. The following is the sequence in which nuclear weapons support plans are usually formulated:

(1) Troop requirements are submitted.

(2) Naval requirements are determined.

(3) The amphibious task force commander consolidates the troop and naval requirements. On the basis of consolidated requirements, the number of nuclear weapons required to support the operation is determined. The weapons are then allocated for prearranged and target-of-opportunity fires and for reserve missions. Insofar as is practicable, the initial troop requirements are approved and incorporated in the amphibious task force nuclear weapons support plans. The amphibious task force commander

may request additional nuclear weapons if those provided do not satisfy the support requirements. If additional nuclear weapons cannot be made available by a higher authority, the amphibious task force commander, in consultation with the landing force commander, adjusts plans accordingly.

(4) After the final allocation of nuclear weapons, the amphibious task force commander designates the method of delivery to be used for each prearranged weapon and specifies the authority for using target-of-opportunity weapons.

(5) When the weapon is to be delivered by a commander outside the amphibious task force, the amphibious task force commander provides him with the essential information involved in the specific delivery. Detailed plans are then prepared by both commanders.

830 PLANNING CONSIDERATIONS

Authority to employ nuclear weapons should be delegated to the lowest echelon which has the intelligence capability to acquire nuclear targets and the capability to coordinate and control the use of nuclear support within its zone of action. Other major considerations in planning for the use of nuclear weapons are weapon supply measures, selection of targets, selection of weapons and delivery means, timing of attack of targets, coordination measures required for timely delivery and safety of friendly forces, and the effect of residual nuclear contamination on the present and future plan of operations.

831 SUPPLY AND RESUPPLY OF NUCLEAR WEAPONS

a. The initiating directive specifies the number, by type, of nuclear weapons allocated to the amphibious task force commander. The initiating directive also specifies procedures for requesting additional weapons. Plans are made for pickup and delivery of weapons to ships during embarkation in accordance with the nuclear weapons support plan. Plans are made for resupply of nuclear weapons, to include:

- (1) Procedures for requesting additional allocations.
- (2) Procedures and assigned responsibility for pickup of weapons and delivery in the objective area.
- (3) Receipt, inspection and storage in the objective area.
- (4) Lead times for obtaining resupply weapons.

832 SELECTION OF TARGETS

a. The initial step in nuclear support planning is the determination of the targets and their nature, configuration, and location on the ground.

(1) Preliminary Target Evaluation. A preliminary target evaluation is made before a target is selected, to determine its suitability for attack by nuclear weapons and the extent of the damage desired. The requirements of the operation are the governing consideration in the evaluation and selection of targets. Other factors are:

(a) Physical nature of the target which should be such as to warrant clearly the expenditure of a nuclear weapon.

(b) Location of the target, which should be such that an attack on it will not endanger friendly forces.

(c) Characteristics of nuclear weapons available.

(d) Effect on the operations of the amphibious task force of the destruction or neutralization of the target.

(e) Probable effect of attack on enemy capabilities.

(f) Terrain and weather, which may affect the accuracy of delivery and the burst effectiveness.

(2) Target Analysis. For each target selected following the foregoing evaluation, an analysis is then made. Information on enemy terrain and weather is studied, and the following is determined for each target:

(a) The type and yield of nuclear weapons desired to obtain the desired effects on the target area.

(b) The height of burst required.

(c) Desired ground zero.

(d) Preferred means of delivery of the weapon.

(e) Time of delivery, based on necessity for coordination with the operations of other forces.

(f) The number of nuclear weapons desired for attack of the target.

(g) Predicted effect to be gained in the target area and on other portions of the objective area adjacent to the target area to include fallout pattern for possible near surface or surface burst.

b. When the various selected targets have been analyzed, they are compared and a relative priority for their attack is determined.

833 SELECTION OF WEAPONS AND DELIVERY MEANS

a. The factors which govern the selection of nuclear weapons and delivery means for any particular situation are:

(1) Availability of weapons, including the number and types of weapons allocated for a particular operation, and time and space factors.

(2) Method of delivery, including aircraft, guided missiles, rockets, artillery, and naval gunfire. Each of these provides a variation in accuracy of delivery, magnitude of burst, range, and all-weather capability.

(3) The target defined by type, composition, location, size, vulnerability, value, and degree of importance.

(4) Weather and topographic conditions.

(5) Safety of friendly forces.

834 TIMING OF ATTACK OF TARGETS

a. **Prearranged Fires.** Nuclear weapons support plans will usually provide for prearranged nuclear fire support. The delivery of such fires in support of the landing force must be timed so as to maintain the element of surprise if practicable, support the scheme of maneuver, and ensure the safety of friendly forces. In the event of nondetonation, a low order detonation, loss, or miss by a prearranged weapon, it will be desirable to deliver another weapon without delay. Prearranged fire plans therefore include provisions for standby reserve weapons ready for immediate delivery.

(1) **Pre-D-Day Prearranged Fires.** Surprise may be forfeited by using nuclear explosives during pre-D-day operations. However, such attacks will usually be warranted when—

(a) The existing enemy dispositions offer a concentrated and remunerative target.

(b) Low air, surface or subsurface weapons are necessary to destroy certain hard targets. The resulting radio-activity will limit early troop operations in the target area. Depending on the tactical situation, commanders must accept either high-radiation doses or delays, to permit radioactive decay. Several hours may be required before transit is safe, and it may be days before the area of highest intensity may be occupied.

(c) The time and space factors preclude the enemy's ability to reinforce or react effectively.

(2) **D-day Prearranged Fires.** The use of nuclear weapons in the D-day preparation may be advantageous when destruction over a wide area is required, when pre-D-day preparations are not used, when destruction must be accomplished in the minimum time, or when simultaneous destruction of several targets is a priority requirement. Where

pre-H-hour fires are used to assist the assault landings, care must be taken to avoid contaminating the landing zones, beaches, and their approaches, or impeding the actions of friendly forces.

b. **Target of Opportunity Fires.** Targets for nuclear attack may be so located as to be profitable for only a relatively short period of time.

The ability to attack such targets of opportunity effectively depends upon:

(1) Timely discovery of the target.

(2) Rapid and accurate analysis of the target.

(3) Existence of a system whereby authority and capability for nuclear weapons employment are vested in the lowest practicable echelon.

(4) Suitable nuclear weapons in the amphibious task force.

(5) Maintenance of nuclear weapons in an advanced state of readiness.

(6) Availability of rapid delivery means.

(7) Existence of an effective system for requesting and approving nuclear fire support, and for coordination with all affected commands.

c. Plans may include the assignment of priorities to certain important areas such as avenues of approach to the beach area or helicopter landing areas, open flanks, and potential assembly areas for armored units. This facilitates the delivery of target-of-opportunity fires. Specific provision should also be made in plans for target of opportunity responsibilities and authority for designated troop commanders. Such use of nuclear weapons is coordinated with other fires of friendly forces (See Chapter 7.)

840 CONTENT OF THE NUCLEAR WEAPON SUPPORT PLAN

a. Nuclear weapons support plans are usually consolidated in a separate document with appropriate portions included in other plans such as naval gunfire, artillery, air, and fire support coordination plans. The nuclear weapons support plan includes instructions for both preplanned and target of opportunity operations. The plan for use of prearranged nuclear weapons includes, in each case—

(1) Target Description.

(2) Type and yield of weapon(s).

(3) Delivery means and delivery organization.

(4) Time of delivery.

(5) Height of burst.

(6) Recommended ground zero.

(7) Provisions for coordination with other operations and fires.

(8) Predicted effect on the target.

b. Plans may include post-strike analysis requirements, alternate targets and alternate weapons.

c. Plans for target-of-opportunity fires include:

- (1) Allocation and location of weapons.
- (2) Procedures for obtaining their delivery.
- (3) Alert status of weapons and delivery means.
- (4) Responsibilities of all affected commanders.

850 DEFENSE AGAINST NUCLEAR WEAPONS

a. Defense against nuclear weapons involves a combination of intelligence as to the capabilities and limitations of enemy nuclear weapons, detection and destruction of enemy carriers of nuclear weapons, as well as all defense measures which will limit or reduce the effect of the enemy's nuclear weapons.

b. Intelligence efforts are directed toward the location of targets such as missile launching sites, pre-positioned nuclear weapons, radar sites, communications center, airfields, nuclear weapons storage sites, and artillery positions requiring systematic destruction.

851 RESPONSIBILITIES FOR NUCLEAR DEFENSE PLANNING

a. Amphibious Task Force Commander. The amphibious task force commander is responsible for the planning of overall defense of the amphibious task force against nuclear attack, based on the active and passive nuclear defense measures required by the landing force and the forces afloat.

b. Landing Force Commander. The landing force commander is responsible for determining and prescribing the active and passive nuclear defense measures required by the landing force. He then presents to the amphibious task force commander those requirements for active defense measures which should be provided by other forces.

852 PREPARATION OF THE NUCLEAR DEFENSE PLAN

a. Provisions for active and passive defense against nuclear attack by the enemy are included in operation plans. The particular factors which must be taken into account in planning for defense against nuclear attack include the following:

(1) Active Defense. In general, the active protective measures which are employed in defense against enemy attack by other weapons are supplemented for nuclear defense by plans to—

(a) Employ nuclear or conventional weapons to eliminate enemy nuclear capabilities.

(b) Destroy enemy launching sites by amphibious raids or helicopter-borne or air-transported operations.

(c) Increase air defense measures.

(d) Increase air and ground reconnaissance.

(e) Increase communication security measures, including the use of countermeasures.

(2) Passive Defense. Passive protective measures used against other explosive weapons give only partial protection against nuclear attack. In the case of the latter greater emphasis must be placed on unit separation, dispersion, and mobility. Increased mobility during the ship-to-shore movement and operations ashore will allow for greater unit separation and will provide additional passive defense against nuclear weapons. In addition, provisions are made for—

(a) Training and indoctrination of personnel.

(b) Individual protection.

(c) Distribution of trained radiological defense personnel.

(d) Decontamination of personnel, equipment, supplies and terrain.

(e) An adequate surface and air radiological monitoring system.

(f) Creation of nuclear salvage units.

(g) Plans for handling mass casualties including employment of mass evacuation units.

(3) Special Provisions for the Ship-to-Shore Movement. Plans are prepared to cover the action required if, during the ship-to-shore movement, the enemy succeeds in attacking the amphibious task force with one or more nuclear explosives which may result in:

(a) Contamination of a beach or landing zone.

(b) Loss of part of the force, and a corresponding requirement for alteration of the tactical plan or for unit replacement.

(c) Mass casualties requiring immediate attention.

853 CONTENT OF THE NUCLEAR DEFENSE PLAN

Nuclear defense plans include provisions for cooperation and coordination, beginning at the time of embarkation, between the corresponding troop and naval elements. These plans are usually prepared to provide for assignment of defense missions, damage control, special monitoring provisions, location of ABC defense material, salvage of contaminated material and similar measures. On occasion, certain of these measures may be included in other appropriate plans for the operation, such as those for the ship-to-shore

movement in the case of passive defense matters and certain fire support plans for offensive operations in the case of active defense matters.

854 CONDUCT OF NUCLEAR WARFARE DEFENSE

a. Effective conduct of nuclear warfare defense requires the establishment of a nuclear warfare defense center by each appropriate naval commander and the assignment of staff responsibilities for nuclear warfare defense by each appropriate

troop commander. These agencies perform the following functions for their respective commanders:

- (1) Collection, recording, and evaluation of monitoring and casualty data.
- (2) Control of monitoring teams.
- (3) Supervision of decontamination installations.
- (4) Advice to commanders on nuclear warfare defense matters, including the determination of the location of ground zero, the execution of special ship-to-shore movement provisions, and rescue and salvage operations.



CHAPTER 9

COMMUNICATIONS PLANNING

CONTENTS

900	SCOPE AND REQUIREMENTS OF COMMUNICATION PLANNING
910	GENERAL COMMUNICATIONS PLANNING CONSIDERATIONS
911	Communications During the Planning Phase
912	Communications During the Embarkation Phase
913	Communications During the Rehearsal Phase
914	Communications During the Movement to the Objective Phase
915	Communications During the Assault Phase
916	Base Development and Garrison Communications
920	RESPONSIBILITIES
930	COMMUNICATIONS DECEPTION AND COUNTERMEASURES, AND PROTECTION AGAINST ENEMY COUNTERMEASURES
940	THE COMMUNICATION PLAN

COMMUNICATIONS PLANNING

900 SCOPE AND REQUIREMENTS OF COMMUNICATION PLANNING

a. An amphibious operation requires a complex, reliable, secure and flexible system of communications. Superimposed on the normal communication system of all forces are the additional requirements for command of the amphibious task force as a whole, for the several special forms of control which must be exercised, and for lateral communications between all elements of the force in the execution of common or coordinate functions.

b. Special communication requirements imposed by the character of the amphibious operation are depicted in Figure 9-1.

c. Changes in command relationships, task organization, and disposition of forces require maximum flexibility in communication plans. These plans must not create a requirement for a large number of non-essential functional circuits. Multiple purpose circuits must be utilized to the maximum by all forces. Common agencies must be utilized where practicable in order to assist in the reduction of mutual interference by decreasing frequency requirements. Use of alternate means other than electrical, such as visual, helicopter or surface messenger, must be exploited to ensure the most rapid and secure delivery of information between widely dispersed forces within the amphibious task force.

910 GENERAL COMMUNICATIONS PLANNING CONSIDERATIONS

a. The communication requirements of an amphibious operation vary with the size and composition of the amphibious task force. Planning to meet these requirements commences, and is conducted concurrently with other planning but embodies the added problem of ensuring that communications must be adequate to support the planning process itself. The following factors must be carefully considered during the planning process:

(1) Each major command of the amphibious task force must have communications compatible with the tactics and techniques employed by that force. The channels provided must assure effective ex-

ercise of command and coordination of supporting fires. Because of the dissimilar nature of the forces involved, additional circuits may be required to permit the desired degree of command and control.

(2) Because elements of the amphibious task force may operate in widely separated areas during some phases of the amphibious operation, the individual communication capabilities of major groups of the amphibious task force must be great. A measure of duplication will accordingly be necessary. The communication plan of each element must, however, permit operation of the force as a whole without undue interference between elements when they are in close proximity. In addition, the nature of the amphibious assault, with its requirement for provision of extensive support from the sea by surface and air means, makes it imperative that plans for tactical communication circuits be detailed and their preparation thoroughly coordinated.

(3) Separation of individual ships and forces as a passive measure of defense against nuclear weapons increases the requirement for longer range radio communications. Accordingly, allocation of shipboard equipment must be considered carefully in the light of naval and landing force requirements. In this respect, the nature of shipboard equipment allocated for the control of or use by helicopter-borne forces must be planned with particular consideration given to the nature of the terrain and the distances which may exist initially between areas of operation ashore and the amphibious task force.

(4) The geographical location of the objective area may dictate the need for special and alternate means of communications. An example of such an objective is one which lies within an aural zone.

(5) Plans must ensure that the administrative, command and tactical communication requirements of all elements of the amphibious task force are met by specific technical provision for communication circuits and nets, and that these provisions are fully coordinated.

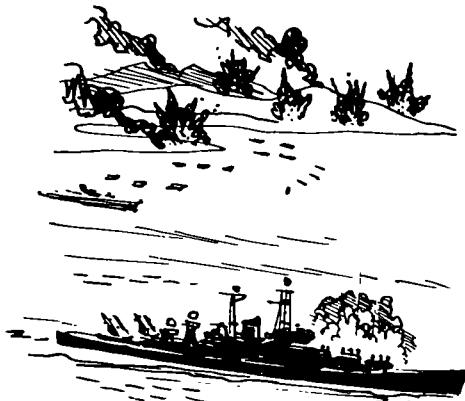
(6) Consideration must be given to the communication requirements involved in the assembly of the amphibious task force.

COMMUNICATION REQUIREMENTS OF AMPHIBIOUS OPERATIONS

FIG. 9-1



RELIABLE AND SECURE
RAPID COMMUNICATIONS
DURING PLANNING PHASE



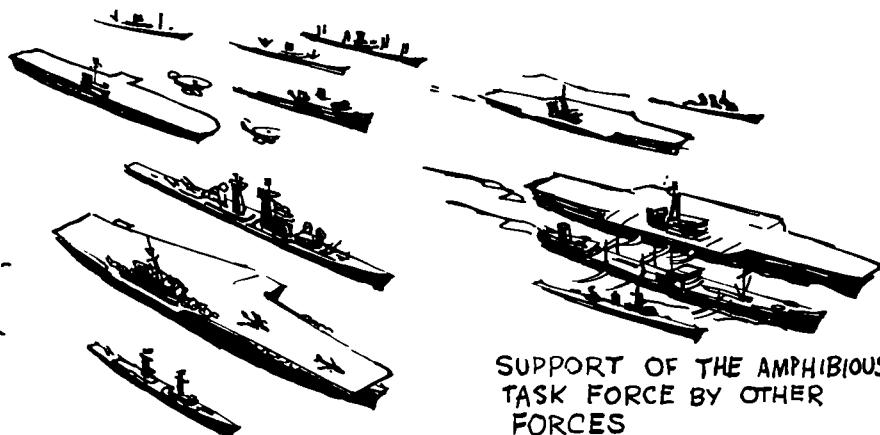
NAVAL GUNFIRE SUPPORT



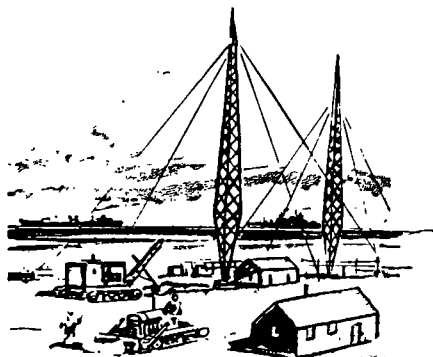
SHIP-TO-SHORE MOVEMENT



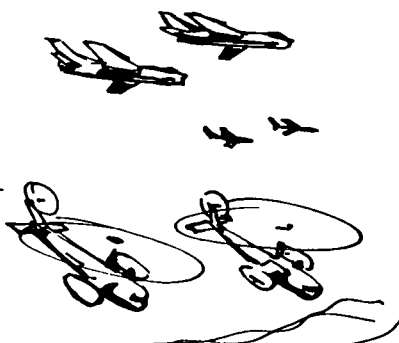
LOGISTICS, INCLUDING
EMBARKATION



SUPPORT OF THE AMPHIBIOUS
TASK FORCE BY OTHER
FORCES



EARLY INITIATION OF ADVANCE
BASE COMMUNICATIONS



AIR SUPPORT - INCLUDING
HELICOPTER OPERATIONS DURING
THE SHIP-TO-SHORE MOVEMENT AND
FOR LOGISTIC SUPPORT



COORDINATION AND EFFECTIVE
USE OF COMMUNICATIONS,
INTELLIGENCE, AND ELECTRONIC
COUNTERMEASURES BY
SURFACE, AIR, SUBMARINE,
AND TROOP COMPONENTS

911 COMMUNICATIONS DURING THE PLANNING PHASE

Communications must be established at the commencement of the planning phase between all major participating commands. The preservation of maximum communication security is essential. It must be maintained even though planning headquarters are separated by great distances. Personal liaison will diminish this communication security problem as well as facilitate concurrent planning.

912 COMMUNICATIONS DURING THE EMBARKATION PHASE

Before embarkation commences plans must provide for adequate communications between naval elements and the forces to be embarked. The landing force commander normally will be assigned the responsibility of planning for, and providing or obtaining, communications in the embarkation area. This may include the coordination of permanent facilities—military or civilian—with those organic to landing force units. Plans must provide for establishment of communications in the pier or beach areas to control embarkation. Early liaison must be established between corresponding naval and landing force elements to ensure efficient functioning of communications during embarkation.

913 COMMUNICATIONS DURING THE REHEARSAL PHASE

a. In order to test communication systems, equipment, and techniques, plans should provide for a full-scale rehearsal for all elements of the task force. Errors uncovered in the communication plan will be corrected as a result of critiques held at the conclusion of the rehearsal. Communication security requirements may dictate adoption of the following precautionary measures during the rehearsal:

(1) Use of minimum power for establishment of radio nets.

(2) Change of frequencies and call signs. However, the security gained by this technique must be weighed against the confusion which might occur during subsequent phases of the operation as a result of this change. The decision as to the degree to which this security device may safely be employed will depend primarily on the state of training of the forces involved.

914 COMMUNICATIONS DURING THE MOVEMENT TO THE OBJECTIVE PHASE

Plans for communications during the movement to the objective, will require Navy forces to pro-

vide all external and intership communications. The use of communication facilities, particularly radio, must be severely restricted to prevent disclosure to the enemy of the locations, movement, and intentions of the amphibious task force. The amphibious task force commander prescribes the conditions of radio silence in effect during the movement. Communication plans must reflect these restrictions and provide for the handling of important messages within the imposed limitations. Communications within various movement groups of the amphibious task force will be provided by helicopter messenger, visual means, or VHF and UHF radio in consonance with the degree of radio silence in effect. Messages from external sources addressed to the amphibious task force or elements thereof normally will be received by interception of radio broadcast schedules.

915 COMMUNICATIONS DURING THE ASSAULT PHASE

During the assault phase primary reliance must be placed on radio and radio relay communications. This requirement is considered in planning the numbers and types of circuits required and the assignment of available frequencies. Communication plans of both naval and landing forces provide for sufficient channels of communications during the ship-to-shore movement to permit the exercise of those measures of control and coordination which are required at all echelons. Communication plans of the landing force provide for the rapid development of landing force communication systems ashore in order to ensure facilities which respond to the needs of the tactical situation as the assault progresses.

916 BASE DEVELOPMENT AND GARRISON COMMUNICATIONS

a. Higher headquarters plans may prescribe that base development and/or garrison communication personnel and equipment shall be embarked and landed with the landing force in order to begin early installation of a planned advanced base communication system. When such plans exist, all usable elements of landing force communication systems ashore should be included in the program for development of the advanced base communications system.

b. These plans may also provide for the establishment of external communications ashore for use upon termination of the operations and after departure of the amphibious task force commander from the objective area. A mobile com-

munications unit for this purpose may be assigned to the landing force commander for embarkation and early establishment ashore.

920 RESPONSIBILITIES

a. Communications Planning Responsibilities of the Amphibious Task Force Commander. The amphibious task force commander is responsible during planning for:

(1) Determination of communication requirements of Navy forces, review and approval of communication requirements of the landing force and other forces, and for consolidation of communication requirements for the amphibious task force as a whole.

(2) Acquisition and assignment of necessary technical facilities to subordinate elements of the force.

(3) Determination of priorities and allocation of shipboard communication facilities to each participating force. Certain radio equipment is installed aboard amphibious ships for use by the landing force. Other available shipboard facilities include boat and helicopter messengers as well as operating spaces.

(4) Determination, consolidation and coordination of the electronic warfare requirements of all participating forces.

(5) Establishment of provisions to ensure adequate communications for the naval elements of the amphibious task force during the planning phase.

(6) Preparation of plans in support of cover and deception plans prescribed for the operation.

(7) Announcement of requirements for establishing liaison between all commands of the participating forces for communication planning.

(8) Preparation and promulgation of a complete and coordinated plan for the employment of communications during the operation.

b. Communication Planning Responsibilities of the Landing Force Commander. The landing force commander is responsible, during planning, for:

(1) Establishing provisions for adequate landing force communications during the planning phase.

(2) Determination of requirements for communication facilities controlled by higher headquarters and submitting these requirements to the amphibious task force commander.

(3) Preparation of requests for the allocation of shipboard communication services or facilities for use by landing force units while embarked.

(4) Development of a landing force electronic warfare plan and stating the requirements for required electronic warfare support to the amphibious task force commander.

(5) Maintenance of liaison with the amphibious task force commander and subordinate landing force units in all communication planning matters.

(6) Development and promulgation of a complete and coordinated communication plan for the landing force and for submitting this plan to the amphibious task force commander for review, coordination, approval and inclusion in the amphibious task force communication plan as appropriate.

c. Communications Planning Responsibilities of Commanders of Other Forces. Commanders of other major forces of the amphibious task force are responsible for the determination of their communication requirements and the submission to the amphibious task force commander of those requirements which must be met by other elements of the amphibious task force.

930 COMMUNICATIONS DECEPTION AND COUNTERMEASURES, AND PROTECTION AGAINST ENEMY COUNTERMEASURES

a. The scope of employment of communications deception and countermeasures is usually specified in directives from higher authority. However, the needs of the amphibious task force for the employment of these techniques should be made known to higher authority during planning. The employment of communications deception and countermeasures is ordinarily most profitable when the enemy has definitely committed himself to a course of action, or when the value of confusing or disrupting his radio communications outweighs the value of the communications intelligence which might be obtained by listening only. Plans for the use of communications deception and countermeasures must be flexible, because it remains, in any specific instance, a command decision to determine whether these techniques shall be used.

b. During planning, equipping, and training for the operation, commanders must bear in mind that, during the assault, the enemy may attempt to deny the successful employment of radio equipment by radio jamming. Steps must thus be taken to minimize the effects of enemy jamming or interference. These measures include:

(1) Use of alternate frequencies and call signs.

(2) Development of plans for locating (DF) enemy jamming stations.

(3) Provision of specialized training for all operators in antijamming procedures.

(4) The use of authentication.

(5) Provisions for other means of communication (such as beamed super-high-frequency, infrared, visual, boat messenger, and helicopter messenger).

(6) Offensive action to locate and to neutralize or destroy enemy jamming stations.

940 THE COMMUNICATION PLAN

a. The amphibious task force communication plan is based on the operation and administrative plans which it is designed to support, as reflected in the communication requirements of the amphibious task force commander, and the coordinate requirements of the commanders of the participating forces. These may include radio and missile guidance and control frequencies, call signs, compatible cryptographic and authentication systems and special communication equipment or support.

b. The communication plan fulfills the communication requirements of the operation in terms of circuits, channels and facilities required, and policies and procedures governing the operation and coordination of the overall system. The plan includes:

(1) General coverage of the communication situation, including assumptions, guiding principles and the concept of operational communication employment.

(2) Announcement of the communication mission.

(3) Delegation of communication tasks and responsibilities to major components of the force.

(4) Detailed instructions relative to the organization, installation, operation, coordination and maintenance of the communication system.

(5) Assignment and employment of call signs, frequencies, cryptographic aids and authentication systems.

(6) Instructions concerning countermeasures, cover and deception, security, recognition and identification, navigation aids and other special communication and electronics functions.

(7) Communication-electronics logistics support.

c. The plan is prepared in minute detail to facilitate its use by participating commanders at all echelons. When information contained in any of the various appendices to the communication plan should be included in subordinate commanders' communication plans, sufficient copies must be provided to permit inclusion therein. This procedure eliminates duplication of preparation and reproduction, and minimizes the possibility of errors.

d. Subordinate commanders' communication plans are based upon the amphibious task force communication plan. The number and scope of those plans should be kept to the minimum consistent with distribution and security considerations.



CHAPTER 10

LOGISTIC PLANNING

CONTENTS

1000 SCOPE OF LOGISTIC PLANNING

1010 LOGISTIC PLANNING CONSIDERATIONS IN AMPHIBIOUS OPERATIONS

1020 LOGISTIC PLANNING RESPONSIBILITIES

1021 Logistic Planning Responsibilities of the Amphibious Task Force Commander

1022 Logistic Planning Responsibilities of the Landing Force Commander

1023 Logistic Planning Responsibilities of Commander(s) of Other Major Forces

1040 LOGISTIC PLANS

1041 Embarkation and Loading Plans

1050 SUPPLY PLANNING

1051 Supply Planning Responsibilities

1052 Plans for Initial Supply

1053 Plans for Resupply

1054 Content of the Supply Plans

1060 MEDICAL PLANNING

1061 Medical Planning Considerations

1062 Medical Planning Responsibilities

1063 The Medical Plans

1070 SHORE PARTY PLANNING

1071 Shore Party Planning Considerations

1072 Shore Party Planning Responsibilities

1073 The Shore Party Plan

1080 PONTON CAUSEWAY AND LIGHTERAGE PLANNING

1081 Planning Considerations

1082 Planning Responsibilities

1083 The Plan

1090 BASE DEVELOPMENT AND GARRISON PLANNING

1091 Planning Considerations

1092 Planning Responsibilities

1093 The Base Development and Garrison Plans

LOGISTIC PLANNING

1000 SCOPE OF LOGISTIC PLANNING

Logistic planning for an amphibious operation embraces the determination of materiel and personnel requirements; their procurement and their distribution to support the operation; and the necessary administrative procedures incident thereto.

1010 LOGISTIC PLANNING CONSIDERATIONS IN AMPHIBIOUS OPERATIONS

a. The most significant influence on logistic planning for the amphibious operation is the necessity for the forces afloat to provide continuing and coordinated logistic and administrative support to the landing force during a period in which its logistic system is primarily ship-based. This influence emphasizes the importance of the following logistic principles, functions and planning factors in an amphibious operation.

(1) Logistic Principles. Basic logistic principles which apply in an amphibious operation are:

- (a) Planning for and conduct of logistic support is a command responsibility.
- (b) The impetus of logistic support is from the rear toward the point of application.
- (c) Logistic support must be continuous and adequate.
- (d) Coordination of tactics and logistics is mandatory.
- (e) The logistics system must be flexible and mobile.
- (f) Combat elements must be relieved of logistic burdens to the greatest possible extent.
- (g) Logistic means must be safeguarded during all phases of the operation.

(2) Logistic Functions. Logistic planning for an amphibious operation must provide for the discharge of these functions (see Figure 10-1):

- (a) The orderly assembly and embarkation of personnel and materiel in sequence designed to meet the requirements of the landing force scheme of maneuver.
- (b) The establishment and maintenance of a logistic support system in the objective area which will ensure adequate logistic and administrative support to all elements of the amphibious task force.
- (c) The initiation of a logistic system for later support of base development and garrison forces.

(3) Logistic Planning Factors. Consideration must be given to the following factors, all of which exert a marked influence on logistic planning for an amphibious operation:

- (a) Elements of the base defense and garrison plans may require consideration. (See paras. 1090 and 1093.)
- (b) The character and expected duration of the contemplated operation.
- (c) The distance of the objective area from supporting logistic bases.
- (d) The estimated freedom from enemy interference which the overseas supply line will enjoy.
- (e) The availability of logistic means.
- (f) The target date
- (g) The progressive increase in the level and form of logistic support required by the build-up of forces in the objective area.
- (h) The local weather conditions in the objective area.
- (i) Terrain and hydrography in the objective area.
- (j) The availability of local resources.
- (k) Support required to provide for prisoner of war and civilian population requirements.

1020 LOGISTIC PLANNING RESPONSIBILITIES

The amphibious task force commander, the landing force commander, and commanders of other major forces in the amphibious task force have specific and complementary logistic planning responsibilities, as presented in the following articles. These planning responsibilities are discharged concurrently by the several elements and by the various echelons of command.

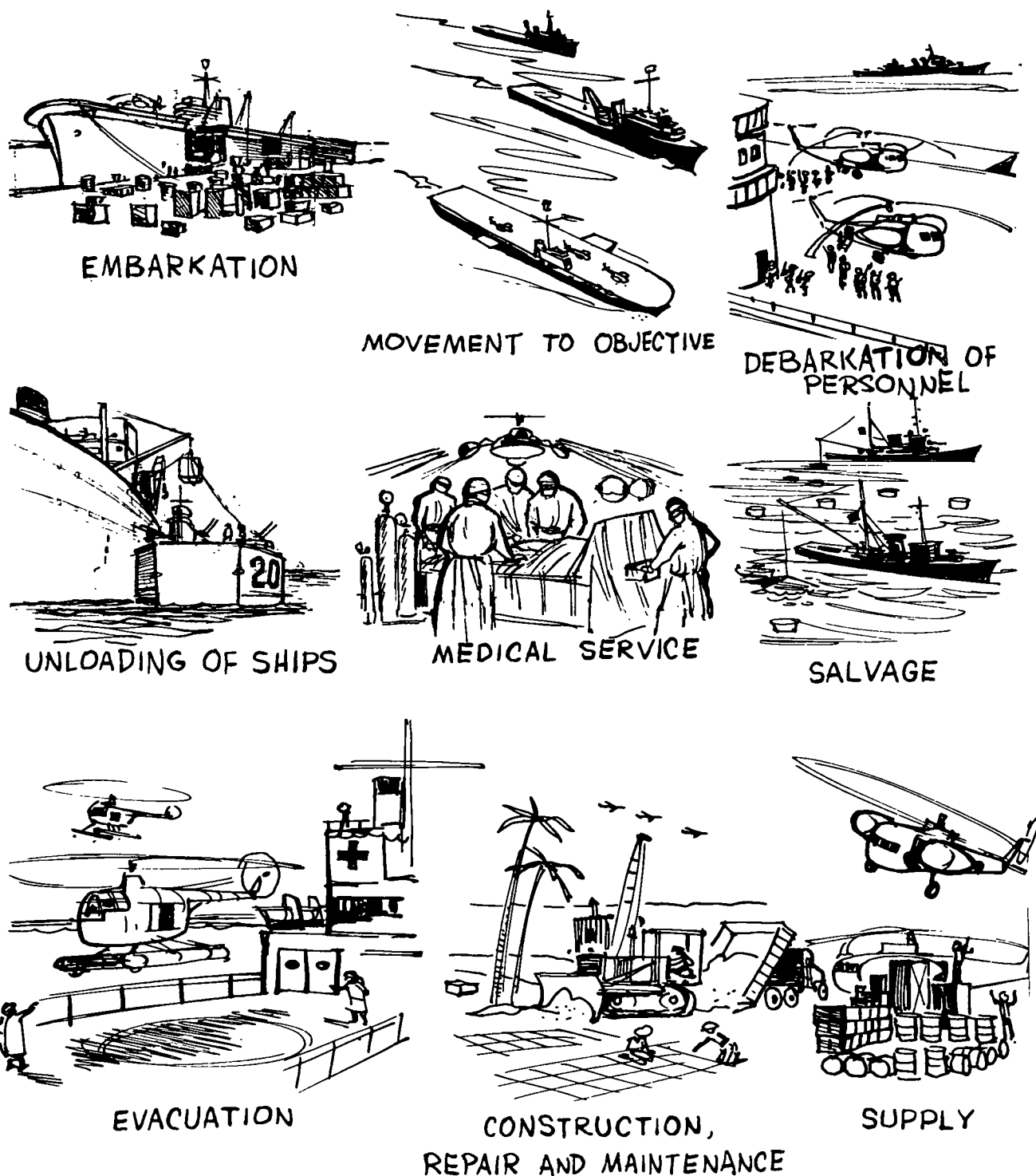
1021 LOGISTIC PLANNING RESPONSIBILITIES OF THE AMPHIBIOUS TASK FORCE COMMANDER

a. The amphibious task force commander is responsible for:

- (1) Determination of the logistic requirements of the Navy forces, including special equipment and shipping requirements.

LOGISTIC FUNCTIONS IN AN AMPHIBIOUS OPERATION

FIG. 10-1



(2) Consolidation of those logistic requirements of all elements of the amphibious task force which must be fulfilled by the Navy forces and determination as to whether or not those requirements can be met with the available means.

(3) Allocation of means of the Navy forces to meet these consolidated logistic requirements.

(4) Notification of responsible agencies of any unusual requirements for routine naval items, and of requirements for special items of naval equipment. These should be submitted early in the planning in order to ensure timely arrival at designated loading points.

(5) Preparation of the over-all embarkation schedule to include plans for the assembly of shipping at points of embarkation.

(6) Review and approval of embarkation and loading plans.

(7) Organization of assigned logistic shipping into echelons as necessary to ensure continuing support of the landing force tactical plan.

(8) Provision of the means required for the establishment and maintenance of an adequate logistic support system in the objective area.

(9) Development of plans for handling prisoners of war and civilian evacuees/internees as well as establishing policy for the administration of civilian affairs if not prescribed by higher authority.

(10) Development of overall plans for evacuation and hospitalization.

1022 LOGISTIC PLANNING RESPONSIBILITIES OF THE LANDING FORCE COMMANDER

a. The landing force commander is responsible for:

(1) Determination of overall logistic requirements of the landing force including units, special equipment and shipping.

(2) Allocation of available means to meet logistic requirements of the landing force.

(3) Determination of the landing force logistic requirements to be fulfilled by the naval forces, and submission of these requirements to the amphibious task force commander.

(4) Development of plans for the assembly of supplies and equipment to be embarked to include the supplies and equipment of other forces that the landing force is responsible for embarking.

(5) Preparation of the landing force embarkation and ship loading plans and orders, in coordination with the amphibious task force commander.

(6) Planning for the coordination of logistic support required by all elements of the landing force.

(7) Development of plans for administering civil affairs in accordance with policies established by the amphibious task force commander and/or higher authority

(8) Preparation of the landing force administrative plan.

1023 LOGISTIC PLANNING RESPONSIBILITIES OF COMMANDER(S) OF OTHER MAJOR FORCES

Commander(s) of other major forces of the amphibious task force are responsible for the determination of their logistic requirements and the submission to the amphibious task force commander of those requirements which must be met by other elements of the amphibious task force.

1030 LOGISTIC PLANNING SEQUENCE

a. Following receipt of the initiating directive for the operation logistic planning at all echelons is begun, and proceeds concurrently. The major steps involved, although overlapping, will usually be accomplished in the following general sequence:

(1) A determination by the landing force commander as to troops, equipment, and supplies necessary to accomplish his tasks ashore.

(2) A computation of the landing force logistic requirements which must be fulfilled by the naval forces and for submission of these requirements to the amphibious task force commander.

(3) A determination of naval requirements by the amphibious task force commander.

(4) A determination of requirements by commander(s) of other major forces.

(5) Consolidation by the amphibious task force commander of all requirements which are to be fulfilled by Navy forces, followed by an examination of those requirements from the viewpoint of the ability of the Navy forces to meet them.

(6) Allocation of available logistic means. If sufficient means are not available, consultation is required with interested commanders, in order to adjust plans or to conclude that additional means shall be requested.

(7) Formulation of logistic plans by the amphibious task force, landing force and other major force commanders.

1040 LOGISTIC PLANS

a. Certain logistic matters in an amphibious operation affect only one component of that force, and plans concerning these are prepared individ-

ually by that component. The details of such plans are therefore not covered in this chapter. Plans for the logistic support of an amphibious operation which, because of their content and scope concern more than one element of the amphibious task force are discussed in the remainder of this chapter. They are:

- (1) Embarkation and loading plans.
- (2) Plans for supply and resupply, to include provisions for debarkation and unloading.
- (3) Medical plans.
- (4) Shore party plans.
- (5) Pontoon causeway and lighterage plans.
- (6) Base development and garrison plans.

1041 EMBARKATION AND LOADING PLANS

This planning task is of such dimension as to require separate treatment. It is covered in Chapter 12.

1050 SUPPLY PLANNING

a. The necessity to provide continuing and coordinated supply support to the landing force during a period in which its supply system is primarily shipbased requires that the naval forces and the landing force develop a control and delivery system which will ensure that the landing force is provided with the necessary supply support until its supply system is established ashore. The control and delivery arrangements will vary from operation to operation. In each case comprehensive and detailed planning is required.

b. In extension of the foregoing considerations, supply planning is accomplished under two major categories; (1) initial supply and (2) resupply.

(1) Initial supply comprises the supply levels carried in assault shipping in order to provide required initial support for the landing and associated operations.

(2) Resupply provides the supply support transported to the objective area in follow-up shipping in order to support tactical operations ashore.

1051 SUPPLY PLANNING RESPONSIBILITIES

a. The landing force commander is responsible for submitting to the amphibious task force commander those requirements for supplies that are to be furnished by the Navy forces.

b. The amphibious task force commander determines the supply requirements for the naval forces, consolidates all requirements and plans for their provision and delivery.

1052 PLANS FOR INITIAL SUPPLY

a. Navy Forces. Initial supply planning provides for:

- (1) Loading ships with naval supplies to prescribed levels as far as practicable prior to embarkation of troops.
- (2) Availability of rations for troops while embarked.
- (3) Availability of special facilities for: refueling and maintenance of aircraft, landing craft, amphibian vehicles, and other equipment; fuel for boat pools, beach groups, transportation pools and other naval shore components.
- (4) Availability of water for troops ashore until supply from sources ashore is available.

b. Landing Force. The initial supply planning by the landing force must provide for:

- (1) Assembly and loading of supplies to be landed with troops, to ensure ready availability for issue prior to and during debarkation.
- (2) The establishment of floating dumps containing limited amounts of selected supplies for emergency on-call issue.
- (3) The selective discharge of supplies including emergency helicopter deliverable supplies.
- (4) Positive and efficient control of the movement of supplies from ship to desired location ashore.

c. Civilian population and prisoners of War. Provisions are also included in supply plans to care for the civilian population and prisoners of war. Such provisions include:

- (1) The items of supply to be carried in assault shipping;
- (2) The amount of food, water, and other supplies to be available aboard ships which are to evacuate civilians or serve as prisoner-of-war ships.

1053 PLANS FOR RESUPPLY

a. Resupply planning provides for follow-up shipping loaded with resupply items to be introduced into the objective area by either one or a combination of the following systems:

- (1) Maintaining the shipping in an on-call status to be ordered into the objective area by the amphibious task force commander as requested by the landing force commander; or

(2) Establishing fixed schedules for bringing the shipping into the objective area automatically as requested by the landing force commander.

b. The factors affecting the decisions in this regard will depend primarily on:

- (1) Distance between the objective area and loading points;
- (2) Availability of forward sheltered ports or anchorages for use as regulating stations;
- (3) Limitations imposed by naval convoy escort availability;
- (4) The availability of aircraft for resupply; and
- (5) Hostile activity on routes of communications.

1054 CONTENT OF THE SUPPLY PLANS

a. Supply Plans are prepared by the amphibious task force commander, the landing force commander, and the commanders of other major forces in the amphibious task force. The plans include the following:

- (1) Primary source(s) of supply and responsibilities.
- (2) Levels of supply to be carried in assault shipping.
- (3) Control and distribution of supplies.
- (4) Plan for landing supplies.
- (5) Resupply responsibilities, schedules and sources.
- (6) Air delivery responsibility procedures and methods.
- (7) Captured material disposition instructions.
- (8) Salvage instructions.

1060 MEDICAL PLANNING

Medical planning for an amphibious operation must provide for maintaining the health of the command, and for the evacuation and hospitalization of the sick and wounded.

1061 MEDICAL PLANNING CONSIDERATIONS

a. Medical planning must consider:

- (1) Overall mission of the force and the supporting medical mission;
- (2) Policies of higher commanders;
- (3) Characteristics of the objective area, including terrain, climatological and disease incidence data, season, sanitary conditions ashore, and cover available; and the corresponding preventive medicine, hygiene, and sanitation measures which must be instituted prior to and during the operation;

(4) Physical and psychological factors affecting own personnel;

- (5) Lines of communication and evacuation;
- (6) Evacuation policies and procedures;
- (7) Specific medical supplies required;
- (8) Size and types of the forces involved, and their tactical employment;
- (9) Estimated casualties based upon the amount and type of enemy opposition expected and the character, probable duration, and objectives of the operation;
- (10) Medical personnel available, and status of training;
- (11) Medical facilities and forces outside the objective area, which will provide medical support;
- (12) Medical needs for civilian population and prisoners of war;
- (13) Need for special naval medical units;
- (14) Requirements for specially fitted ships to serve as evacuation control ships;
- (15) Requirements for specifically designated and fitted landing craft and helicopters to provide ambulance facilities; and
- (16) Requirements for hospital ships and for the designation and medical augmentation of specific amphibious ships to meet anticipated hospitalization requirements.

1062 MEDICAL PLANNING RESPONSIBILITIES

a. Amphibious Task Force Commander. The amphibious task force commander is responsible for the following, and prepares plans accordingly:

- (1) Provision of medical service to all embarked personnel during the period between embarkation and landing;
- (2) Provision of medical personnel, supplies, and equipment for all naval units based ashore and not attached to the landing force.
- (3) Seaward evacuation by surface means from the beaches; receipt of patients and hospitalization afloat within the objective area; and initial casualty reporting for Navy, landing and other forces.
- (4) Evacuation by ship or air from the objective area to medical facilities outside the objective area;
- (5) Air transport of medical supplies and equipment;
- (6) Formulation in conjunction with the landing force commander of an evacuation policy for the operation; and
- (7) Establishment of medical requirements and standards for the civilian population in the objective area, when these are not prescribed by higher authority.

b. Landing Force Commander. The landing force commander is responsible for the following, and prepares plans accordingly:

(1) Provision of medical service to landing force personnel prior to embarkation;

(2) Assistance to ships' medical department by providing medical personnel to care for landing force personnel while embarked;

(3) Evacuation to the rear; and from the objective area as directed;

(4) Provision of medical service to all personnel ashore in the objective area who are not otherwise provided for;

(5) Determination of the medical service requirements of the landing force which must be furnished by the Navy, and submission of these requirements to the amphibious task force commander; and

(6) Submission of recommendations to the amphibious task force commander concerning establishment of the evacuation policy for the operation.

1063 THE MEDICAL PLANS

a. The amphibious task force medical plan is usually issued as an annex to the operation plan. It provides for medical service to all elements of the amphibious task force in accordance with the foregoing responsibilities, and includes the following:

(1) A statement of the medical situation;

(2) A statement of the evacuation policy;

(3) Clear delineation of the medical responsibilities, organization, and employment of the several elements, with particular emphasis on shifts in responsibility during the several phases of the operation and the measures necessary to ensure coordinated medical action by all elements of the task force;

(4) Provision for medical services in connection with the evacuation of casualties from the objective area;

(5) Medical supply, including operation of medical supply dumps afloat and provision for the automatic replenishment of supply and exchange of medical equipment.

(6) Procedures and responsibilities for keeping necessary records and reports of the flow of casualties;

(7) Provisions for medical service to patients while afloat;

(8) Provision for obtaining medical intelligence; and

(9) Measures for preventive medicine, radiological medicine, hygiene, and sanitation.

b. The landing force medical plan is issued as an annex to the landing force administrative plan and includes the following:

(1) The organization and employment of landing force medical facilities in support of the operation;

(2) Provision for collection of medical intelligence;

(3) Provision for zones and phases of medical responsibility;

(4) Provision for casualty evacuation;

(5) Announcement of the evacuation policy;

(6) Provision for medical supply and its control;

(7) Medical instructions to subordinate units of the command;

(8) Measures for preventive medicine, radiological medicine, hygiene, and sanitation; and

(9) Provision for medical reports and records.

1070 SHORE PARTY PLANNING

The shore party is a task organization of the landing force with attached naval units. It is formed for the purpose of facilitating the landing and movement off the beach of troops, equipment, and supplies; for evacuation from the beach of casualties and prisoners of war; and for facilitating the beaching, retraction, and salvage of landing ships and craft. The landing force shore party plan is formulated in coordination with related naval plans to provide for the accomplishment of these tasks.

1071 SHORE PARTY PLANNING CONSIDERATIONS

a. In developing the shore party plan, consideration must be accorded the following factors, insofar as they will affect shore party operations:

(1) The landing force scheme of maneuver and the related landing plan;

(2) Expected enemy activity and located enemy installations in the landing area;

(3) Topographic and hydrographic conditions in the landing area and adjacent areas;

(4) Requirements for beach development;

(5) Requirements for multiple separated logistic installations to provide for passive defense against ABC weapons;

(6) Amounts and types of supplies and equipment to be landed;

(7) Types of ships to be unloaded;

(8) Availability of personnel for shore party operations;

(9) Availability of shore party equipment;

(10) Policy concerning disposition and method of handling prisoners of war;

(11) Casualty evacuation policies;

(12) Coordination required with other agencies.

1072 SHORE PARTY PLANNING RESPONSIBILITIES

a. The conduct of shore party operations is a command function of the landing force. However both Navy and landing forces participate in and contribute to the development of plans for shore party organization and employment.

(1) The amphibious task force commander is responsible for the preparation of plans to provide the naval facilities and means to ensure effective support of shore party operations. Examples of such plans are the pontoon causeway and lighterage plan, the unloading plan, the casualty evacuation plan, and the prisoner-of-war evacuation plan. In addition, the amphibious task force commander provides the naval components required for shore party operations. These components, organic to a naval beach group, are assigned to the landing force for use within the shore party as a beach party. The assignment is made in sufficient time to allow for adequate integrated training before embarkation begins.

(2) The landing force commander determines and presents his requirements for naval support of shore party operations to the amphibious task force commander. These requirements should be presented as early as possible in the planning phase.

(3) The landing force commander is responsible for ensuring that the necessary shore party activation orders are issued by himself or subordinate commanders, as required. Those orders include provisions for assignment of landing force elements, allocation of equipment, and information and instructions as to the time the attachment of beach parties and reinforcing elements become effective.

1073 THE SHORE PARTY PLAN

a. The landing force commander and appropriate subordinate commanders prepare shore party plans containing instructions for the functioning of the shore party including the beach party.

(1) The shore party plan includes:

- (a) Organization and mission of the shore party.
- (b) Instructions to all subordinate elements.
- (c) Shore party communication instructions.
- (d) Beach defense instructions.
- (e) Administrative instructions.

1080 PONTOON CAUSEWAY AND LIGHTERAGE PLANNING

The amphibious task force commander plans for and directs the utilization of pontoon causeways and lighterage.

1081 PLANNING CONSIDERATIONS

a. Planning for the utilization of pontoon causeways and lighterage must consider:

- (1) Landing force requirements.
- (2) Hydrographic conditions.
- (3) Availability of required types of shipping.

1082 PLANNING RESPONSIBILITIES

The landing force commander is responsible for presenting to the amphibious task force commander requirements, upon which the amphibious task force commander bases his plans for pontoon causeway and lighterage support for the operation. The amphibious task force commander prepares the pontoon causeway and lighterage plan in consultation with the landing force commander.

1083 THE PLAN

The plan includes details on loading, transportation, launching, initial operational assignment, and provisions for maintenance and salvage of the causeway and lighter equipment. It also contains specific instructions for transition of control. The plan should include provisions for retaining lighterage in the area after the assault shipping departs for use in unloading follow-up shipping and for other support of tactical operations. It is promulgated as an annex to the amphibious task force commander's logistic plan.

1090 BASE DEVELOPMENT AND GARRISON PLANNING

Base development and garrison planning is carried out in accordance with directives of higher authority and responds to the requirements of the strategic plan. The amphibious task force commander may be required to include in his plan provisions for the initiation of base development.

1091 PLANNING CONSIDERATIONS

The preparation of base development and garrison plans are covered herein, only as they influence the planning for an amphibious operation. Because of the progressive nature of base development, which may commence during the assault phase and usually continues after the amphibious operation is completed, a high degree of planning coordination must be achieved between amphibious task force, landing force, service force and other major force commanders.

1092 PLANNING RESPONSIBILITIES

a. The amphibious task force commander has planning responsibility for:

(1) Allocation of shipping from within the amphibious task force to lift base development forces.

(2) Embarkation and for the movement of forces and equipment to the objective area.

(3) Allocation of means to control, support, and coordinate base and garrison operations during the amphibious operation.

b. The landing force commander is responsible during planning, for:

(1) Plans to initiate base development ashore.

(2) Plans to coordinate control and support garrison operations ashore.

(3) Security measures.

1093 THE BASE DEVELOPMENT AND GARRISON PLANS

The base development and garrison plans are issued separately from the plans for an amphibious operation. They are prepared by a level of command higher than the amphibious task force. Pertinent extracts may be included in the amphibious task force plan.

CHAPTER 11

SHIP-TO-SHORE MOVEMENT PLANNING

CONTENTS

- 1100 DEFINITION, PURPOSE, AND SCOPE**
 - 1101 Relation to Other Planning**
- 1110 RESPONSIBILITIES FOR SHIP-TO-SHORE MOVEMENT PLANNING**
 - 1111 Ship-to-Shore Planning Responsibilities of the Amphibious Task Force Commander**
 - 1112 Ship-to-Shore Planning Responsibilities of the Landing Force Commander**
 - 1113 Ship-to-Shore Movement Planning Responsibilities of the Attack Group Commander and Corresponding Landing Group Commander**
 - 1114 Ship-to-Shore Planning Responsibilities of Commanders of Other Major Forces**
- 1120 SHIP-TO- SHORE MOVEMENT PLANNING CONSIDERATIONS**
- 1130 SHIP-TO-SHORE PLANNING SEQUENCE**
- 1140 RESPONSIBILITIES IN THE PREPARATION OF THE LANDING PLAN**
 - 1141 Navy Responsibility for Preparation of Landing Documents**
 - 1142 Landing Force Responsibility for Preparation of Landing Documents**
 - 1143 Mutual Responsibility for Preparation of the Debarkation and Enplaning Schedules**
- 1150 SERIAL NUMBERS**

CHAPTER 11

SHIP-TO-SHORE MOVEMENT PLANNING

1100 DEFINITION, PURPOSE, AND SCOPE

a. **Definition.** The ship-to-shore movement is that part of the assault phase which pertains to the timely deployment of troops and their equipment from assault shipping to designated positions ashore in the landing area.

b. **Purpose.** It has as its purpose the landing of assault units at the proper times and places and in the formations required by the landing force scheme of maneuver ashore.

c. **Scope.** It commences on order of the amphibious task force commander and is brought to a close when unloading of assault shipping is completed. The ship-to-shore movement may be divided into two periods:

(1) The assault and initial unloading period which is primarily tactical in character and must be instantly responsive to landing force requirements ashore.

(2) The general unloading period, which is primarily logistic in character and emphasizes speed and volume of unloading operations.

1101 RELATION TO OTHER PLANNING

Detailed planning for the ship-to-shore movement can begin only after the scheme of maneuver ashore is determined. The ship-to-shore movement plan must, in turn, be substantially completed before embarkation planning can begin. The plan for the ship-to-shore movement and the plan for supporting fires must be carefully integrated, and the plan for the ship-to-shore movement must provide for the requisite logistic support of all forces ashore. Maximum tactical security against enemy counteraction is essential.

1110 RESPONSIBILITIES FOR SHIP-TO-SHORE MOVEMENT PLANNING

Responsibilities for determination of the requirements of the amphibious task force and its major subordinate forces during the ship-to-shore movement, and for the preparation of the necessary plans to meet these requirements, are set forth in the following articles.

1111 SHIP-TO-SHORE PLANNING RESPONSIBILITIES OF THE AMPHIBIOUS TASK FORCE COMMANDER

The amphibious task force commander is responsible for the preparation of the over-all ship-to-shore movement plan. This includes the allocation of ships and landing craft.

1112 SHIP-TO-SHORE PLANNING RESPONSIBILITIES OF THE LANDING FORCE COMMANDER

The landing force commander is responsible for determining his requirements for the ship-to-shore movement and presenting them to the amphibious task force commander; for presenting the availability of landing force helicopters and amphibian vehicles; and preparing the troop landing plans.

1113 SHIP-TO-SHORE MOVEMENT PLANNING RESPONSIBILITIES OF THE ATTACK GROUP COMMANDER AND CORRESPONDING LANDING GROUP COMMANDER

When attack groups and landing groups are formed, plans for the ship-to-shore movement are prepared by each group commander in the same manner as the amphibious task force commander and the landing force commander.

1114 SHIP-TO-SHORE PLANNING RESPONSIBILITIES OF COMMANDERS OF OTHER MAJOR FORCES

Commanders of other major forces assigned to the amphibious task force, including those assigned for movement to the objective area for the initiation of tasks not a part of the amphibious operation, are responsible for determining and presenting their requirements for the ship-to-shore movement to the amphibious task force commander. Normally these requirements will be integrated by the landing force commander into those of the landing forces, and included in the plans prepared by the amphibious task force commander and the landing force commander.

1120 SHIP-TO-SHORE MOVEMENT PLANNING CONSIDERATIONS

a. The principal factors which influence planning for the ship-to-shore movement are:

(1) The basic requirement for providing maximum support for accomplishment of the initial tactical operations ashore to include maintenance of tactical integrity of the landing force and achieving the required degree of concentration or dispersion.

(2) The required degree of dispersion of assault shipping to include contemplated employment of the sea echelon.

(3) The availability of the means for landing.

(4) The protection available to the amphibious task force.

(5) The need to maintain sufficient flexibility to exploit weaknesses in enemy defenses.

(6) The availability and planned utilization of supporting arms.

(7) The need for speed and positive control.

1130 SHIP-TO-SHORE PLANNING SEQUENCE

a. As is true for other plans in amphibious operations, ship-to-shore plans are prepared concurrently by the parallel chains of command and by the several echelons of command. Recognizing this necessary overlap, plans are usually formulated in the following sequence:

(1) Landing force requirements as to means are submitted to the amphibious task force commander, along with a statement of organic landing force ship-to-shore means (helicopters and amphibian vehicles) which are available;

(2) Naval requirements are determined;

(3) Landing force and naval requirements are consolidated; and

(4) Detailed landing force and naval ship-to-shore plans are prepared to support the landing force tactical plan.

b. If the means available cannot satisfy the requirements for the ship-to-shore movement, the landing force and/or amphibious task force commanders request that additional means be made available. If additional means cannot be made available by higher authority, the amphibious task force commander and the landing force commander must adjust their plans accordingly.

c. The detailed landing force and naval ship-to-shore plans are prepared after the final allocation of means has been made. These plans represent the sum of detailed plans for the waterborne and heli-

copter-borne ship-to-shore movement prepared by corresponding naval and landing force echelons at all levels from the individual ship/embarkation team to the amphibious task force/landing force level.

1140 RESPONSIBILITIES IN THE PREPARATION OF THE LANDING PLAN

a. The plan for landing is composed of certain specific documents which present in detail all instructions for execution of the landing. The documents are incorporated in annexes to the operations and administrative plans and orders. Together they constitute the plan for landing.

b. Commanders responsible for the preparation of the several landing documents furnish copies to interested Navy and landing force commanders. The purpose of each of these documents, and the responsibilities for its preparation, are presented in the following articles.

1141 NAVY RESPONSIBILITY FOR PREPARATION OF LANDING DOCUMENTS

a. The landing documents prepared by Navy commanders include:

(1) Landing Craft Availability Table. A tabulation of the types and number of landing craft, available from each ship in the transport organization, for use in the ship-to-shore movement. The table is the basis of the assignment of landing craft to boat groups and to other tasks for which landing craft are to be employed. The landing craft availability table is prepared by the transport group commander.

(2) Landing Craft Employment Plan. The plans for the assignment and movement of landing craft from the various ships to satisfy naval and landing force requirements. It indicates the number of landing craft, their type, their parent ships, the ships to which they are to report, the time at which they are to report, and the period attached. The plan is prepared by the transport group commander.

(3) Approach Schedule. A document which indicates for each scheduled wave, the time of departure from the rendezvous area (or ship, if landing craft are dispatched directly to the line of departure); from the line of departure and from other control points; and the time of arrival at the beach. It also shows the scheduled time of H-hour; the beaches; the wave numbers; the courses the landing craft follow; the names of control officers, boat group commanders, and assistants; the numbers of control ships and any other necessary information. The approach schedule is prepared by the commander of the naval transport organization embarking an assault battalion

(or equivalent) landing team, with the advice and assistance of the battalion (or equivalent) landing team commander. All approach schedules are submitted to higher headquarters, for approval, for coordination, and for consolidation when appropriate. The amphibious task force commander, together with the landing force commander makes any modifications necessary to coordinate the over-all ship-to-shore movement.

(4) Assault Area Diagram. A document which contains extracts from other pertinent landing forms, and normally shows diagrammatically the beach designations, the boat lanes, the organization of the lines of departure, the scheduled waves, the landing ship areas, the transport areas, and the fire support areas in the immediate vicinity of the boat lanes. Pertinent portions of the assault schedule and landing craft and amphibian vehicle employment plan are listed. The assault area diagram is prepared by the transport group commander.

(5) Sea Echelon Plan. The plan for reduction of concentration of amphibious shipping in the transport area, to minimize losses due to enemy attack by mass destruction weapons and to reduce the area to be swept of mines. The plan contains a priority sequence table for entry of ships into the transport area, procedure for requesting sea echelon shipping out of sequence, and the limitations of sea echelon operating areas. The sea echelon plan is prepared by the amphibious task force commander, but decisions to use a sea echelon and the extent of its use are reached jointly by the amphibious task force commander and the landing force commander.

1142 LANDING FORCE RESPONSIBILITIES FOR PREPARATION OF LANDING DOCUMENTS

a. The landing documents prepared by troop commanders include:

(1) Amphibian Vehicle Availability Table. A tabulation of the type and number of amphibian vehicles available primarily for assault landings and secondarily for other operations. The table indicates the ships which transport the vehicles, the number and type of vehicles carried by each ship, with explanatory remarks. The amphibian vehicle availability table is prepared by the landing force or landing group commanders, when landing groups are formed.

(2) Amphibian Vehicle Employment Plan. A plan which indicates in tabular form, the planned employment of amphibian vehicles, including their employment after the initial movement to the beach. The plan lists, with amplifying remarks, the origin of the amphibian vehicles, the number and type of amphibian vehicles to be employed, and the desti-

nation of the vehicles. The amphibian vehicle employment plan is prepared by the landing force or landing group commanders, when landing groups are formed.

(3) Assault Schedule. A document which prescribes the formation, composition, and timing of waves landing over the beaches. The schedule lists the wave number of each scheduled departure and other control points, and the unit embarked in the landing craft of the wave. The schedule indicates, for each wave, the number and type of landing craft or amphibian vehicles, the units using the landing craft or amphibian vehicles, and the serial numbers of the units making up the wave. The assault schedule is prepared by the landing force or landing group commanders, when landing groups are formed.

(4) Landing Sequence Table. A document which incorporates the detailed plans for the ship-to-shore movement of nonscheduled units of a troop division. The table is used as the principal document in executing and controlling the movement of nonscheduled units. It is the basis for embarkation and loading plans of the units concerned. The table contains the designations of the units, by serial numbers, in the estimated order of their movement ashore. The table further indicates the content of each serialized unit, the minimum number and smallest type of landing craft and/or amphibian vehicles which can land the serialized unit, the beaches on which the units are expected to land, and remarks pertinent to specific units. The landing sequence table is prepared by the landing force or landing group commanders, when landing groups are formed.

(5) Serial Assignment Table. A document which contains the serial numbers in numerical order, the unit (or part) making up the serialized unit assigned to the waterborne ship-to-shore movement, the number of personnel in the unit, the ships from which the unit is to be unloaded, the material in the unit, the minimum number and smallest types of landing craft and/or amphibian vehicles which can land the unit, and special information. An example of the latter would be the inclusion of helicopter lift data to provide for possible emergency movement ashore of serialized units embarked in ships equipped with a helicopter platform which otherwise are scheduled for the waterborne movement. The serial assignment table is prepared by the landing force or landing group commanders, when landing groups are formed.

(6) Landing Craft and Amphibian Vehicle Assignment Table. A tabulation which indicates the organization of landing force units into boat teams,

and the assignment of boat teams to a wave or to a nonscheduled unit. The table may also include instructions for the assignment of floating dump supplies to landing craft or amphibian vehicles. Together with the debarkation schedule, it furnishes the ship's commanding officer with information for debarkation and floating dump supplies. It is prepared by the commanding officer of troops of each ship for all embarked troops and emergency supplies.

(7) Landing Diagram. A graphic means of illustrating the plan for the ship-to-shore movement of a battalion landing team of similar combat unit. It is distributed to all personnel responsible for controlling the formation of the boat group and its waves during the ship-to-shore movement. The landing diagram provides information as to the tactical deployment of units for the beach assault. The landing diagram lists wave numbers, the time of landing of each wave, landing craft numbers, the number of landing craft in the wave, the position within the wave of each landing craft, the major component units of each wave, the scheduled time of H-hour, and the beach color and number. It is prepared by the battalion landing team commanders.

(8) Helicopter Availability Table. A tabulation of the number and types of helicopters available for a proposed helicopter operation. The table is used as a basis upon which the helicopter-borne unit determines the employment of available helicopters early in the planning phase. The table is prepared by the senior helicopter unit commander.

(9) Helicopter Landing Diagram. A document which portrays graphically routes to and from landing zones and the helicopter transports. It is submitted to the landing force and amphibious task force commander for coordination and approval. The diagram is prepared by the senior helicopter unit commander.

(10) Helicopter Employment and Assault Landing Table. The detailed plan for the movement of helicopter-borne troops, equipment, and supplies. The table is prepared by the helicopter-borne unit commander and the associated helicopter unit commander.

(11) Heliteam Wave and Serial Assignment Table. A tabulation of the tactical units, equipment, and supplies that are to be loaded into each helicopter. The table identifies each heliteam with its assigned serial number, and the serial number with

the flight and wave. The table is prepared by helicopter-borne unit commanders assisted by the associated helicopter unit commander.

1143 MUTUAL RESPONSIBILITY FOR PREPARATION OF THE DEBARKATION AND ENPLANING SCHEDULES

a. The landing documents prepared jointly by the commanding officer of the ship and the corresponding commanding officer of troops include:

(1) The Debarkation Schedule. A plan which provides for the orderly debarkation of troops and equipment and emergency supplies for the waterborne ship-to-shore movement. It shows; (1) the sequence in which landing craft, by type, come alongside the debarkation stations; (2) the individual boats and boat teams or supply loads which load from each troop debarkation station; (3) the heavy equipment to be unloaded from each hatch, and the type of boat into which it is to be loaded; (4) the boat teams loading at the rail, the davits at which they load, and the boats into which they are loaded; and (5) free boats and their boat team numbers.

(2) The Helicopter Enplaning Schedule. A plan which provides for the orderly enplaning of troops, supplies and equipment for the helicopter-borne ship-to-shore movement. It shows (1) the enplaning stations on the flight deck of the ship; (2) the sequence in which helicopters are spotted at the enplaning stations; and (3) the serialized heliteam with equipment and supplies assigned to each helicopter in each designated flight.

1150 SERIAL NUMBERS

a. Serial numbers are used as a convenient means of identifying elements of the landing force and other amphibious task force components which are to be landed prior to the commencement of general unloading, except for floating dumps. Their use facilitates control of the ship-to-shore movement. A single serial number is assigned to each unit or grouping, including its equipment, which for tactical or logistic reasons:

- (1) is embarked entirely in one ship;
- (2) is to be landed as a unit at one beach or helicopter landing zone; and
- (3) is to be landed at approximately the same time.

PART III

EXECUTION OF THE AMPHIBIOUS OPERATION

Chapter

- 12 Embarkation**
- 13 Rehearsals**
- 14 Movement to the Objective Area**
- 15 Preassault Operations**
- 16 The Assault**



CHAPTER 12

EMBARKATION

CONTENTS

1200 DEFINITION

1210 ORGANIZATION FOR EMBARKATION

1220 EMBARKATION PLANNING

1221 Embarkation Planning Responsibilities

1222 Embarkation Planning Considerations

1223 Sequence of Embarkation Planning

1230 CONTENT OF EMBARKATION PLANS AND LOADING PLANS

1240 TYPES OF LOADING

1250 METHODS OF STOWAGE

1260 EXECUTION OF THE EMBARKATION

1261 Responsibilities in Execution of Embarkation

CHAPTER 12

EMBARKATION

1200 DEFINITION

a. The embarkation phase is the period during which the forces, with their equipment and supplies are embarked in the assigned shipping.

b. The embarkation phase embraces the orderly assembly of personnel and material and their embarkation in the assigned shipping in a sequence designed to meet the requirements of the landing force scheme of maneuver.

1210 ORGANIZATION FOR EMBARKATION

a. The organization for embarkation consists of a special task organization established by the landing force commander and a specific task organization of Navy forces established by the amphibious task force commander. The task organizations are formed to simplify the planning and execution of embarkation at all levels of command. During loading, the landing force embarkation organization commander at each level establishes at the embarkation point a control office which is used in common by the control agencies of the troop embarkation organization and the corresponding transport organization. From the control offices, liaison is established with port and other external agencies. Secure, reliable, and rapid communication must be established and maintained between naval forces and landing forces in the embarkation area, between supply dumps and embarkation points, and between the advance staging areas and embarkation points. Upon completion of the embarkation phase of the operation, this temporary task organization dissolves.

(1) Amphibious Task Force Organization for Embarkation. Assault shipping assigned to transport the landing force to the objective area is formed into tactical groupings. The number and type of ships assigned to each of these groupings is determined by the size and composition of the corresponding echelon of the landing force organization for embarkation.

(2) Landing Force Organization for Embarkation. Assault elements of the landing force are organized into embarkation teams, embarkation elements, embarkation units, and embarkation groups. Through this organization the landing force commander exercises direction and control of both the planning and execution of embarkation of the landing force.

(3) Parallel Organizations.

(a) The embarkation team consists of the troop units and supplies and equipment embarked in a single ship. A ship is the parallel naval echelon.

(b) The embarkation element consists of two or more embarkation teams grouped together to conform to the organization for landing. A transport element/landing ship element is the parallel naval echelon.

(c) The embarkation unit consists of two or more embarkation elements grouped together to conform to the organization for landing. A transport unit/landing ship unit is the parallel naval echelon.

(d) The embarkation group consists of two or more embarkation units (when formed), two or more embarkation elements (when units not formed), or a combination of embarkation elements and embarkation units which conforms to the organization for landing. A transport group is the parallel naval echelon.

1220 EMBARKATION PLANNING

a. Embarkation planning includes:

- (1) Determination of shipping requirements.
- (2) Development of detailed troop and naval organizations for embarkation.
- (3) Determination of desired assignment of troops, equipment and supplies to each ship.
- (4) Preparation of detailed loading plans and loading schedules.

b. Plans for the assembly of assault shipping, and for movement of troops to embarkation points are prepared by the amphibious task force and landing force commanders respectively. These plans must be coordinated, and are distributed as soon as possible to commands having operational control of the assault shipping and troop units scheduled to join the amphibious task force. The plans are also distributed to area and base commanders concerned. This permits the initiation of preliminary movements and preparations to ensure that embarkation is begun without unnecessary delays. The assembly and movement plans are usually issued by the amphibious task force and landing force commanders, respectively, as separate documents in the form of embarkation schedules and movement orders.

1221 EMBARKATION PLANNING RESPONSIBILITIES

a. The amphibious task force commander, the landing force commander, and the subordinate commanders within the organization for embarkation have specific embarkation planning responsibilities, as presented in the following articles.

(1) The amphibious task force commander is responsible for:

(a) Allocating shipping space to the landing force.

(b) Organizing naval forces for embarkation.

(c) Preparing the over-all embarkation schedule to include movement of assault shipping to embarkation points in accordance with the embarkation plans and loading plans.

(d) Reviewing and approving the over-all landing force embarkation plans and loading plans.

(e) Providing ship loading characteristics pamphlets to the landing force commander.

(f) Developing plans for the procurement and coordination of means required from external agencies to support the embarkation.

(g) Advising the landing force commander as to personnel and materiel of Navy and other forces which are to be embarked with the landing force.

(2) The landing force commander is responsible for:

(a) Determining assault and follow-up shipping requirements of the landing force, and advising the amphibious task force commander.

(b) Developing the organization of the landing force for embarkation. The landing force commander recommends, if necessary, adjustments in transport organization so that the shipping assigned by type for troop use by the major units of the landing force will conform to the organization for embarkation, which, in turn, will conform to the organization for landing.

(c) Determining the means required from forces afloat and external agencies at the embarkation points during loading, and advising the amphibious task force commander thereof.

(d) Designating shipping in which troop units will be embarked, preparing the detailed embarkation and loading plans and submitting them to the amphibious task force commander for review and approval.

(3) Commanding officers of individual ships are responsible for the detailed planning required to embark the troops and equipment of the embarkation team assigned his ships in accordance with the embarkation plan prepared by the embarkation team commander. The individual ship planning is developed in the detail required to ensure an orderly execution of the embarkation and encompasses those

specific items enumerated in Article 1261a(4). The commanding officer reviews and approves the detailed loading plans of the embarkation team commander from the viewpoint of the safety and performance of his ship.

(4) The embarkation team commander is responsible for the preparation of detailed loading plans for that ship embarking the troops, equipment and/or supplies of the embarkation team. These plans encompass those specific items enumerated in Article 1261a(5). He submits these plans to the individual ship commander for review and approval.

(5) Officers specially trained in the technique of planning and supervision of loading for an amphibious operation are assigned to landing force organizations, to major amphibious ships, and to naval staffs involved in an embarkation. In the troop organization such officers are entitled embarkation officers. They have the status of special staff officers in the headquarters in which they are assigned. In the naval organization such officers are entitled ship (or staff) combat cargo officers. The troop embarkation officers and naval combat cargo officers advise and assist their respective commanders in planning the embarkation and supervising its execution. The embarkation officers and combat cargo officers of related troop and naval organizations maintain liaison during the embarkation.

1222 EMBARKATION PLANNING CONSIDERATIONS

a. In planning for embarkation, consideration must be given to the following, all of which will affect the provisions of the embarkation plan:

(1) The organization for embarkation of the landing force must be compatible with the plan for the ship-to-shore movement, which, in turn, must support the scheme of maneuver ashore.

(2) The tactical integrity of troop task units must be maintained. However, separate units must be so loaded as to minimize the effects attending the loss of one ship.

(3) The minimum number of ships which will meet requirements should be kept at the objective. The units of the landing force not required initially in the assault phase, or whose employment is deferred, are loaded and dispatched so that their arrival at the objective is scheduled to coincide with their contemplated employment. Careful planning by all echelons, both landing force and Navy is necessary to accomplish this objective. In addition, the manner in which ships are loaded frequently determines the number required at the objective at one time and the speed in which they are unloaded.

(4) Landing force commanders and their staffs at the several levels of command are embarked in the same ships as the corresponding naval commanders.

(5) Embarkation areas and points must be selected. Generally, the selection of embarkation areas and points is influenced by the available space, time available for loading, docks, piers, beach loading areas, and other usable facilities. Consideration must be given to:

- (a) Availability of suitable storage facilities.
- (b) Adequacy of road nets and space available for processing supplies and equipment brought into the staging areas.
- (c) Availability of harbor services.
- (d) Availability of a suitable protected anchorage or roadstead.
- (e) Suitability of beaches to beach landing craft and ships and to permit amphibian vehicles to enter and leave the water.

(6) Troop staging areas may be required when the bivouac or camp areas of the troop units to be embarked are so located that movement to the embarkation areas cannot be accomplished without interruption. To facilitate the final movements to the embarkation areas, troop staging areas are selected by the landing force commander at the sites in proximity to the embarkation areas. A troop staging area must provide adequate space and facilities to accommodate designated units. Consideration must be given to the dispersion of troop staging areas to avoid vulnerable concentrations. When troop staging areas are used, movements are scheduled, insofar as possible, to keep troops in their staging areas for the minimum length of time consistent with transportation, security, and maintenance requirements, in order to preserve the combat readiness of the troops. This may require the maintenance of a staging and organization beyond the time the principal elements of the force sail, in order to accommodate those troop echelons which are to proceed to the objective area in later increments. Embarkation organizations should be used as staging organizations so that a final check on the preparation for embarkation may be made and deficiencies or other discrepancies corrected. Staging areas used by the amphibious task force enroute to the objective are covered in Chapter 14.

(7) Ship loading characteristics pamphlets must be furnished to the landing force. They are provided by the Navy for each amphibious type ship. The pamphlet contains all ship's data that are required by the landing force for embarkation. The diagrams and capacity totals in the pamphlet show the accommodations and cargo space for each ship. All data in

the pamphlet must be complete, accurate, and self-explanatory in every detail. Each pamphlet includes:

(a) A listing of the general transport characteristics of the ship, including principal characteristics, troop accommodations, landing craft, and such other information as may be appropriate under this listing. Pamphlets for large ships such as APA, AKA, LPH, LPD and LSD also include an inboard profile of the ship, to approximate scale, showing the relative location of compartments and cargo holds, and a plan view showing debarkation stations and location of landing craft.

(b) Troop berthing diagrams, in approximate scale, showing troop officer and troop enlisted berthing spaces with the number of bunks in each berthing space.

(c) Troop cargo space diagrams, drawn to scale, showing information on square footage of deck space, hatches, locations of stanchions and other obstructions or irregularities, overall dimensions, and indicating the bale cubic capacity and clearance under frames and hatch coamings. If the compartment is fitted for the stowage of special cargo such as gasoline, ammunition, pyrotechnics, or vehicles, such information is included.

1223 SEQUENCE OF EMBARKATION PLANNING

a. Following receipt of the initiating directive for an amphibious operation, embarkation planning commences at all echelons, and proceeds concurrently. The major steps will overlap, but are usually accomplished in the following general sequence:

(1) The establishment of liaison between corresponding naval and troop levels of command.

(2) Provision by the amphibious task force commander of planning data concerning the personnel and materiel of naval and other forces to be embarked with the landing force.

(3) Determination by the landing force commander of his assault and follow-up shipping requirements, and the submission of these requirements to the amphibious task force commander.

(4) Allocation of shipping by the amphibious task force commander. If sufficient shipping is not available, consultation is required between interested commanders in order to adjust plans or to determine the requirement for additional shipping.

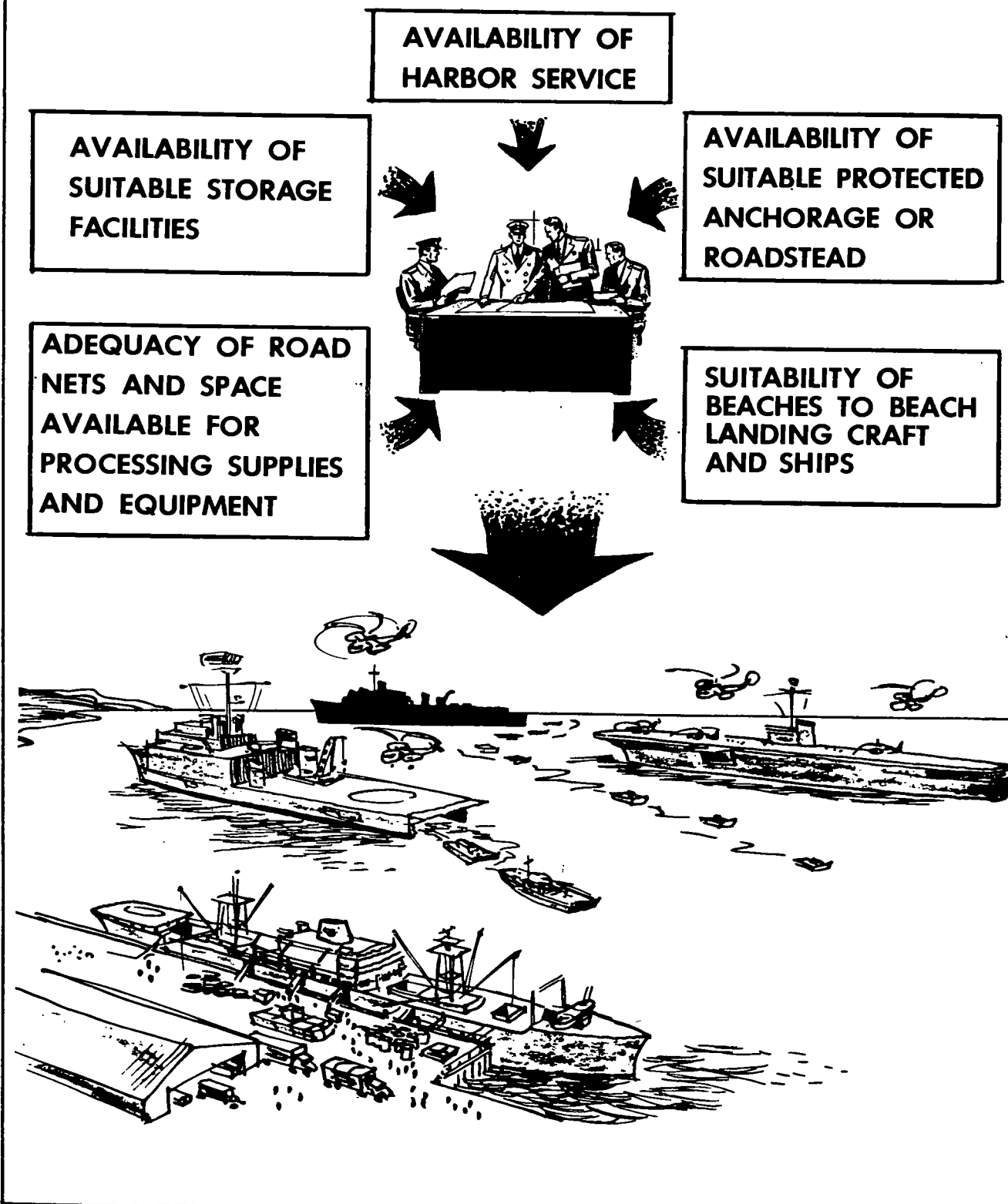
(5) Distribution of ship's characteristics pamphlets to the landing force.

(6) Establishment of organizations for embarkation by the amphibious task force and landing force commanders.

(7) Selection and preparation of embarkation areas.

FACTORS IN SELECTION OF EMBARKATION AREAS AND POINTS

FIG. 12-1



- (8) Selection and preparation of landing force staging areas when required.
- (9) Determination of control, security, and communication facilities required during the embarkation.
- (10) Development of plans for the assembly of assault shipping and for the movement of personnel and materiel to embarkation points.
- (11) Preparation, review, approval and promulgation of embarkation detailed plans and loading plans.

1230 CONTENT OF EMBARKATION PLANS AND LOADING PLANS

a. The amphibious task force commander and subordinate Navy commanders prepare loading plans. They are issued as a part of the operation plan. These loading plans prescribe:

- (1) The organization of the Navy forces for loading.
- (2) Availability of shipping for the embarkation of the landing force, including schedule of arrival and departure from embarkation points.
- (3) Availability of special handling equipment.

b. The landing force commander and appropriate subordinate commanders prepare embarkation plans. They are issued to accompany the operation plan. These embarkation plans prescribe:

- (1) The organization for embarkation and assignment to shipping.
- (2) Supplies and equipment to be embarked.
- (3) Location and assignment of embarkation areas.
- (4) Control and communications arrangements which will prevail during embarkation.
- (5) Schedules, movement details, and embarkation sequence of personnel and materiel in conformity with embarkation schedules announced by the amphibious task force commander.
- (6) Instructions covering the operation of materiel handling equipment.
- (7) Additional instructions covering the loading and handling of special weapons.

c. Each embarkation team commander prepares a detailed ship loading plan. It is reviewed and approved by the commanding officer of the ship from the viewpoint of his ability to carry it out, and in terms of the safety of his ship. Complete loading plans include:

- (1) A consolidated embarkation and tonnage table.
- (2) A consolidated unit personnel and tonnage table.
- (3) A consolidated vehicle summary and priority table.
- (4) A consolidated cargo and loading analysis.

- (5) A consolidated vehicle table.
- (6) A stowage diagram.
- (7) A profile loading diagram (If required).

d. Detailed instructions on the design and preparation of these documents are provided in appropriate landing force manuals.

1240 TYPES OF LOADING

a. There are two general types of ship loading—administrative and combat.

(1) Administrative Loading. Administrative loading gives primary consideration to achieving the maximum utilization of troop and cargo space without regard for tactical considerations. Equipment and supplies must be unloaded and sorted before they can be used. Administrative loading is employed only for non-tactical movement.

(2) Combat Loading. Combat loading gives primary consideration to the facility with which troops, equipment, and supplies can be unloaded ready for combat on landing, rather than to economical utilization of ship space. There are three methods of combat loading. They differ mainly as to the degree of availability of troop units for landing and as to the tactical integrity of the units. They are:

(a) Combat Unit Loading is the method by which all or a part of a combat unit, such as an assault battalion landing team, is completely loaded in a single ship, with essential combat equipment and supplies, in such a manner as to be immediately available to support the tactical plan upon debarkation, and to provide a maximum of flexibility to meet possible changes in the tactical plan.

(b) Combat Organizational Loading is the method by which a unit with its equipment and initial supplies is loaded into a single ship, together with other units, in such a manner as to be available for unloading in a predetermined order.

(c) Combat Spread Loading is the method of loading by which some of the troops, equipment, and initial supplies of a unit are loaded on one ship and the remainder are loaded in one or more others. This method is commonly used for troop units with heavy equipment.

(d) Commodity Loading. Commodity loading is a method of loading in which various types of cargo are loaded together, such as rations, ammunition, or boxed vehicles, in order that each commodity can be discharged without disturbing the others.

(e) Selective Loading. Selective loading is the arrangement and storage of equipment and supplies aboard a ship in a manner designed to facilitate issue to units.

1250 METHODS OF STOWAGE

a. There are several methods by which equipment, supplies and materiel required in an amphibious operation are stowed. These methods are designed to afford quick and immediate access to, and unloading of, this cargo in order to make it available in planned sequence in support of the landing force. These methods of stowage are discussed in the following subparagraphs.

(1) Horizontal Stowage. Horizontal stowage is the lateral distribution of unit equipment or categories of supplies so that they can be unloaded simultaneously from two or more holds.

(2) Vertical Stowage. Vertical stowage of unit equipment or a given category of supplies is a method of stowage in depth within a single compartment by which the loaded items are continually accessible for unloading, and the unloading can be completed without corresponding changes or prior unloading of other cargo.

(3) Block Stowage. Block stowage is a method whereby an assortment of various kinds of equipment or supplies is made up and loaded together. Thus, a balanced proportion of the entire cargo may be discharged without disturbing the remainder of the cargo.

1260 EXECUTION OF THE EMBARKATION

The embarkation is executed in accordance with the approved embarkation plans and is a mutual responsibility of the naval forces, landing forces and external supporting agencies as designated.

1261 RESPONSIBILITIES IN EXECUTION OF EMBARKATION

a. Specific responsibilities for execution of the embarkation are discussed in the subparagraphs below.

(1) Responsibilities of the amphibious task force commander are:

(a) Overall coordination and control, and general supervision of the execution of embarkation in accordance with the embarkation schedule and loading plans.

(b) Movement of assault shipping to embarkation points in accordance with the embarkation schedule.

(c) Coordination with external agencies for control of the embarkation and movements to embarkation points.

(d) Provision of communications facilities, including adequate security measures, required afloat.

(2) Responsibilities of the landing force commander are:

(a) Preparation of the landing force for embarkation.

(b) Making known the assistance which will be required from forces afloat in loading.

(c) Movement of embarkation components to and within the embarkation areas, and assembly of cargo and personnel on shore in accordance with the embarkation schedule and loading plans.

(d) Security of the embarkation areas, or the coordination of security measures with external agencies as prescribed by higher authority.

(e) Supervision of troop activities during loading.

(f) Provision for an embarkation control office ashore.

(g) Provision for communications ashore in the embarkation area, including adequate communications security measures. To preclude significant commitment of organic communications equipment of the landing force required to be embarked, additional equipment should be provided for use in the embarkation area. If possible, arrangements should be made with the commander of the area in which the embarkation is to take place to provide for the embarkation area shore communications requirements.

(3) External agencies may be given responsibilities such as the following, by higher authority:

(a) Specifying and making available required staging areas, embarkation areas, and embarkation points, and developing and operating facilities therein.

(b) Providing authorized supplies and services to the amphibious task force, including supplies to be loaded at each embarkation area and necessary communications facilities for use during embarkation.

(c) Coordination and control of administrative movements within the embarkation areas.

(d) Security of the embarkation area or areas.

(e) Providing, at each embarkation point, loading equipment required on the docks, technical assistance, dunnage, and other aids.

(4) Commanding officers of individual ships are responsible for:

(a) Having all troop spaces ready for troop use in accordance with the ship's loading characteristics pamphlet.

(b) Handling, securing, and stowage of cargo in their ships in accordance with the approved loading plans. The commanding officer's responsibility commences with the actual lifting or transportation of each piece of cargo by personnel under his control. When transported, lifted, or loaded by personnel not

under his control, the commanding officer's responsibility begins when the cargo is safely stowed on board, and accepted by him.

(c) Making provision for winchmen, hatch tenders, hatch officers, and all other personnel for handling cargo in their ships, except for the ship's platoon which is provided by the landing force.

(d) Making provisions for lighterage and craft.

(e) Providing cargo handling gear and lashing gear (to include slings, lowering lines, and guide lines) as prescribed by ship's allowance.

(f) Providing for billeting and messing of the personnel of the advance party who embark in his ship.

(5) The embarkation team commander is responsible for:

(a) Ensuring that personnel, equipment, and cargo are ready for embarkation in accordance with the loading plans. This includes preparation of equipment and supplies, such as filling fuel tanks and loading basic ammunition loads in trucks and

tanks; waterproofing vehicles; marking supplies and equipment; crating; and packaging.

(b) Providing an advance party for his assigned ship, to arrive at the embarkation point prior to the commencement of loading. The advance party will usually include the embarkation officer and assistants, a communications detail, a billeting detail, mess detail, and a ship's platoon. The personnel of the advance party board the ship and assist in the embarkation by providing communications facilities for landing force use, labor, billeting guides, and guards, and by performing other duties as may be required.

(c) Organizing and operating an embarkation team control office, if one is required, at the embarkation point.

(d) Providing shoring and dunnage material.

(e) Providing slings and lashing gear required in excess of that furnished in accordance with item (e) of Article 1261a(4).

(f) Ensuring that pier or beach working parties are available for use in the loading area.



CHAPTER 13

REHEARSALS

CONTENTS

- 1300 DEFINITION AND PURPOSE
- 1310 THE REHEARSAL PLANS
- 1320 REHEARSAL PLANNING CONSIDERATIONS
- 1330 TYPES OF REHEARSALS
- 1340 PREOPERATIONAL BRIEFINGS
- 1350 SECURITY
- 1360 FEASIBILITY

CHAPTER 13

REHEARSALS

1300 DEFINITION AND PURPOSE

a. Definition. The rehearsal is that phase of an amphibious operation in which one or more exercises are conducted by the amphibious task force or elements thereof, under conditions approximating those of the contemplated amphibious operation. It is executed in accordance with a plan which approximates the plan for the specific operation, and its participants should include all units which are to take part in the operation. It is assumed, prior to undertaking rehearsals for a specific amphibious operation, that the elements of the amphibious task force have already achieved a satisfactory state of training for amphibious operations in general.

b. Purpose. The purposes of rehearsals are to test:

- (1) Adequacy of, and familiarity of all echelons with plans;
- (2) Timing of detailed operations;
- (3) Combat readiness of participating forces;
- (4) Communications.

1310 THE REHEARSAL PLANS

During the planning phase rehearsal plans which will accomplish the purposes enumerated in the preceding paragraph are prepared. Responsibility for the preparation of these plans is the same as for the preparation of the actual operation plan. Rehearsal plans should be issued separately, but should be similar to the operations and administrative plans for the actual operation as is practicable.

1320 REHEARSAL PLANNING CONSIDERATIONS

a. In planning for rehearsals consideration must be given to the number, nature and scope of rehearsals, the date and time for each, and the area in which they will be conducted.

(1) The number, nature, and scope of rehearsals will be influenced by the following considerations.

- (a) The complexity of the tasks assigned the amphibious task force.
- (b) The time available for rehearsals.
- (c) The state of training of the forces.
- (d) Suitability of available rehearsal areas.

(e) Special or unusual problems to be faced in the actual operation, the solution to which must be accorded special attention in rehearsal.

(f) Intelligence and counterintelligence considerations..

(2) The dates upon which rehearsals are conducted and the time allocated for them must provide for:

(a) Complete and careful execution of the entire rehearsal.

(b) Reembarkation of all troops, equipment, and supplies in a manner which conforms to the original embarkation plan.

(c) Rehabilitation or replacement of equipment and supplies, and repair or replacement of any damaged or lost landing craft, ships, or aircraft.

(d) Critiques at all levels of command in order to evaluate the exercise, to emphasize and to correct mistakes.

(e) Time to revise plans in those particulars which the rehearsal has disclosed to be necessary

(3) Selection of the rehearsal area is influenced by the following:

(a) Suitability.

(b) Similarity of the rehearsal area to the actual landing area.

(c) Feasibility of employing live ammunition.

(d) Security.

(e) Susceptibility to enemy interference.

(f) Location of the rehearsal area in relation to the objective, and to points of embarkation.

(g) Health conditions at the rehearsal area.

(h) Activity of civilians, vehicles, shipping, and small craft which may interfere with the rehearsal.

1330 TYPES OF REHEARSALS

a. Separate force, staff, and integrated rehearsals are held in preparation for amphibious operations.

(1) Separate Force Rehearsals. Separate rehearsals are those conducted by elements of an amphibious task force whose tasks are not intimately associated with those of the main body of the amphibious task force. The advance force and the demonstration force are examples of forces that usually conduct separate rehearsals, rather than rehearsals integrated with the main body of the amphibious task

force. Supporting forces, not a part of the amphibious task force and which do not participate directly in the actual assault phase of an amphibious operation, may not be required to participate in integrated rehearsals of the amphibious task force. Such forces hold separate rehearsals or may be rehearsed with other participants of an amphibious operation with whom coordination of mutual support is required. Naval striking and covering forces and submarine forces, are some of the forces for which separate rehearsals for amphibious operations may suffice. Separate forces whose operations demand close integration with the assault may be required to participate with integrated rehearsals.

(2) Staff Rehearsals. Staff rehearsals are those conducted by all staffs scheduled to participate in the amphibious operation, and take the form of command post and/or "game board" exercises. They are conducted prior to integrated rehearsals. Wherever possible, such rehearsals should include the exercise of communication facilities.

(3) Integrated Rehearsals. At least two integrated rehearsals are desirable for the assault phase of an amphibious operation..

(a) The first integrated rehearsal usually omits actual bombardment and unloading of supplies, while stressing perfection of communications, and control in execution of the ship-to-shore movement. Only token numbers of landing craft, helicopters and landing ships may be employed, but the full control system for both landing craft and aircraft should be exercised.

(b) The final integrated rehearsal is conducted, as nearly as possible, in accordance with the plans for the actual operation. If practicable it includes naval gunfire and air support with live ammunition. During this rehearsal, there should be extensive troop participation, unloading is carried out as determined during planning, in sufficient degree to test effectively the tactical and logistic plans, the operation of the ship-to-shore movement control organization, and functioning of the shore party, including naval components.

(4) Each rehearsal should be followed by a critique.

1340 PREOPERATIONAL BRIEFINGS

Prior to rehearsal, and again prior to the assault, preoperational briefings should be held at all levels of command to ensure thorough understanding of the plans. The movement to the objective, where a long passage is involved, provides an excellent opportunity for final briefings.

1350 SECURITY

a. Because of similarity between the rehearsal and the actual operation strict security measures must be enforced during rehearsals. The reconnaissance for, selection of, and arrangements for the use of the areas in which rehearsals are to be held must be carefully conducted. Deceptive measures may be necessary to ensure the security of the rehearsal.

b. Unauthorized observation by personnel not part of the amphibious task force, or unauthorized communication by personnel of the amphibious task force with external agencies, must be prevented. Sealing off of personnel and ships, and establishment of security perimeter patrols around the rehearsal area, both at sea and ashore, are primary means of achieving security. Special precautions must be taken to achieve communication security. (See Chapter 9)

1360 FEASIBILITY

During the early phases of planning, a determination of the feasibility of conducting a full scale rehearsal must be made. In the case of a general war, the most significant factor to be considered is the threat of an enemy atomic attack on the amphibious task force. This threat may be such as to preclude all but staff or separately conducted integrated rehearsals for parallel elements of the naval and landing forces. In an emergency situation, the requirement for the timely execution of the amphibious operation may preclude the conduct of a full scale rehearsal.

CHAPTER 14

MOVEMENT TO THE OBJECTIVE AREA

CONTENTS

- 1400 METHOD OF ACCOMPLISHMENT
- 1401 Movement to the Objective Area—Air Echelon
- 1410 ORGANIZATION FOR THE MOVEMENT
- 1411 Pre-D-Day Groups
- 1412 D-Day Groups
- 1413 Post-D-Day Groups
- 1414 Follow-up Shipping
- 1420 PLANNING RESPONSIBILITY
- 1430 ROUTES, AREAS, AND POINTS
- 1431 Sea Routes to the Objective Area
- 1432 Sea Routes in the Objected Area
- 1433 Staging Areas
- 1434 Sea Areas
- 1435 Regulating Points
- 1436 Geographic Reference Points
- 1440 SECURITY
- 1450 THE PASSAGE AT SEA
- 1451 Navigational Aids
- 1452 Protective Measures En Route
- 1453 Logistics En Route
- 1454 Training Exercises En Route
- 1455 Communications En Route
- 1456 Coordination During Passage
- 1460 THE APPROACH
- 1461 Advance Force
- 1462 Main Body
- 1463 Demonstration Force
- 1464 Later Echelons of the Main Body
- 1465 Coordination During Approach

CHAPTER 14

MOVEMENT TO THE OBJECTIVE AREA

1400 METHOD OF ACCOMPLISHMENT

Movement of the amphibious task force to the objective area includes: departure of ships from loading points in an embarkation area; the passage at sea; and the approach to, and arrival in, assigned positions in the objective area. The amphibious task force is organized for the movement into movement groups, which proceed in accordance with the movement plan on definitely prescribed routes with alternate routes designated for emergency use. Sortie and entry usually require special protective measures to prevent enemy attack, particularly by submarines. The passage at sea may be made without a stop, or it may be interrupted by rehearsals, by stops in staging areas for logistic reasons, and by stops at regulating points. Movements for the purpose of postponement may be necessitated by adverse weather or other unfavorable situations. Reference points (designated by code names) are used for control purposes. Special charts promulgated to all commands concerned during planning, govern the movement.

1401 MOVEMENT TO THE OBJECTIVE - AIR ECHELON

Shore based air units of the amphibious task force deploy to assigned bases as directed. Control of air units passes to the amphibious task force commander upon arrival in his assigned area of operations or as prescribed by higher authority.

1410 ORGANIZATION FOR THE MOVEMENT

For movement to the objective area, the amphibious task force is subdivided into movement groups, according to the speed and other characteristics of the ships involved and according to the time the ships are desired in the objective area. Some of these movement groups arrive in the objective area prior to D-day, some on D-day, and others after D-day. The amphibious task force organization for movement to the objective area must closely parallel, or permit rapid deployment into, the organization for landing and support of troop operations ashore.

1411 PRE-D-DAY GROUPS

The movement groups arriving prior to D-day comprise the advance force. Under certain conditions when surprise is essential, such a force may not be employed. The advance force usually proceeds to the objective area as a single movement group. However, if there is a wide disparity of speed between various ships of the advance force, or if part of the landing force is included to capture off-lying islands or other key terrain points prior to the arrival of the main body of the amphibious task force, it may be necessary to organize the advance force into two or more movement groups, each with a screen. Mine warfare ships, and other ships suitable for screening but with other primary functions, may be employed for screening duties during the movement, but usually they will not be available for the fixed area screen after arrival at the objective until their mine warfare or other duties slacken.

1412 D-DAY GROUPS

a. The movement groups arriving on D-day comprise the main body of the amphibious task force consisting of the following groups, each with a screen:

- (1) One or more transport groups
- (2) One or more landing ship groups
- (3) One or more support groups
- (4) One or more carrier groups.

b. Under certain conditions, it may be desirable to attach all or part of the support and support carrier groups to the transport and landing ship groups to provide protection from hostile attack while en route. Protection from hostile attack while en route may also be provided by forces not a part of the amphibious task force. Mine warfare ships, and other ships suitable for screening but with other primary functions, may be employed for screening duties during movement to the objective area.

c. The components of the amphibious task force may be echeloned into the objective area, instead of being brought in simultaneously. The components arriving on D-day may consist only of the forces required to initiate the landing. The remaining components may be phased in during succeeding days.

1413 POST-D-DAY GROUPS

Movement groups of the amphibious task force scheduled to arrive in the objective area after D-day are usually organized into one or more fast movement groups and/or one or more slow movement groups, each with its screen.

1414 FOLLOW-UP SHIPPING

This is made up of ships not originally a part of the amphibious task force, but which carry supplies in support of the operation. The first follow-up convoy may arrive in the objective area before unloading of the assault shipping is completed. Operational control of these convoys is passed to the amphibious task force commander at a designated point before their arrival in the objective area.

1420 PLANNING RESPONSIBILITY

a. Movement Plan. The amphibious task force commander is responsible for preparing a movement plan during the planning phase. In operations in which several attack groups are involved, he usually prepares a general movement plan in which coordinating measures are included as necessary. Subordinate force/group commanders prepare their own detailed movement plans. Since the details of the movement depend on the over-all requirements of the operation, the movement plans are generally among the last plans to be completed during the planning phase. Each movement is usually included as an annex to the appropriate operations plan or order.

b. Coordination with Other Forces. Coordination between the various external forces supporting an amphibious operation, and between those forces and the amphibious task force, is provided for in the planning of area and fleet commanders.

c. Postponement Plan. Postponement may be necessary, owing to exceptionally bad weather conditions or unexpected moves by major enemy forces after amphibious task force has started its movements from final staging areas toward the objective area. This contingency is provided for by the execution of a postponement plan. Usually, the postponement is on a 24-hour basis which involves backtracking or the diversion of ships into a designated sea area. A longer postponement may involve a return to a staging area. The postponement plan is prepared by the amphibious task force commander, and is usually promulgated as a part of his operation order.

d. Alternate Plans. The alternate plan for an amphibious operation may so differ from the preferred plan that separate movement or approach plans

are necessary. It will seldom be possible to determine far in advance the time at which an alternate plan will be placed in effect. Movement plans must therefore be flexible enough for execution at any point between the final staging area and a point as close as practicable to the objective area.

1430 ROUTES, AREAS, AND POINTS

It is essential that information on all routes, areas, and points of the amphibious operation be promulgated to all commands and ships concerned. Some are prescribed by the area or fleet commander; the remainder are prescribed by the amphibious task force commander. Regardless of which authority prescribes them, all routes, areas, and geographical references points must, to ensure thorough dissemination, be shown on charts and tables, and included in the operations plan of the amphibious task force commander. Provision is also made for issuing the charts and tables to ships which enter the area but do not receive the operations plan.

1431 SEA ROUTES TO THE OBJECTIVE AREA

a. Routes and route points to the objective area are determined by the amphibious task force commander, subject to approval by the fleet or area commander, or his designated representative. The routes selected should lead from all possible ports of departure to the objective area. Alternate routes are also provided to avoid interference between forces, and to permit diversion should the threat of enemy attack or weather prevent the use of primary routes. Routes and route points are given names to facilitate reference. Small-scale charts, which show sea routes and route points, are prepared and included in the operation plans and orders of appropriate amphibious task force echelons.

b. All routes selected should be wide enough for a movement group commander to evade submarines and to maneuver his group without interfering with other groups in the same route, moving in opposite directions or at different speeds of advance in the same direction.

1432 SEA ROUTES IN THE OBJECTIVE AREA

a. Sea routes in the objective area are determined by the amphibious task force commander. During planning, consideration is given to the missions of the various task forces, groups, units, and elements in the objective area, so that they may proceed expeditiously to their assigned stations without interference. Since the terminals of the sea routes in the objective area are at designated points just outside the area screen, the routes up to these

points are planned so that there will be a minimum of interference during the deployment of forces from their cruising or approach formations to assigned stations or areas.

(1) Requirements. Sea routes in the objective are selected that will —

(a) Ensure a minimum of interference among ships and formations.

(b) Offer possibilities for good navigational fixes.

(c) To the maximum extent possible, be clear of mineable water and navigational hazards.

(d) Provide sufficient dispersion to prevent concentrations which should make profitable targets for mass destructive weapons.

(e) Provide for economy of screening and covering forces.

(2) Charts. Large-scale charts, which show the sea routes and sea areas in the objective area and the ocean and sea areas adjacent thereto, must be prepared. These charts must be included in the operations plans and orders of appropriate echelons of the amphibious task force.

1433 STAGING AREAS

a. Plans may be made by the amphibious task force commander to use staging areas while en route from the embarkation areas to the objective area. The amphibious task force may stage through one or more intervening ports for logistic support, emergency repairs, and/or final rehearsals. The amphibious task force commander selects the staging areas required, and ensures that —

(1) The necessary service craft are available.

(2) There is promulgated a general logistic schedule, amplified by subordinate commanders as required, to be effective in the staging area.

(3) Anchorages are assigned with a view toward expediting logistics and, at the same time, facilitating entry and sortie of the various movement groups staging through the area, but avoiding vulnerable concentrations.

(4) If rehearsals are to be held, provision is made for replacing or repairing urgently needed equipment or supplies which may be expended or damaged during rehearsals, particularly smoke and fuel supplies, amphibian vehicles and landing craft.

1434 SEA AREAS

a. In order to minimize the possibility of interference between various components of the amphibious task force and other supporting forces, sea areas in the vicinity of the objective are selected and designated by the amphibious task force commander, or higher commander. The sea areas are divided into a number of operating areas, each of

which comes under one of the following general types: (1) the ocean operating areas surrounding the objective area, and (2) the sea areas in the objective area. The areas are titled to facilitate reference.

(1) Ocean Operating Areas. Three kinds of ocean operating areas are selected. The first are close support areas near, but not necessarily in, the objective area. These areas are assigned to support carrier groups, hunter-killer groups, and certain logistic support components. The second are distant support areas, located in the vicinity of the objective, but a considerable distance to seaward of it. These areas are assigned to distant supporting forces such as striking and covering forces, hunter-killer groups, and their logistic support groups. The third is a distant retirement area located to seaward of the objective. This area is divided into a number of operating areas to which assault shipping may retire and operate in the event of heavy weather or to prevent concentration of shipping at the objective.

(2) Sea Areas in the Objective Area. The sea areas in the landing area and extending outward to the inner limits of the close support ocean operating areas are known as the sea areas in the objective area. The number and titles of the areas vary with each operation, but they usually include:

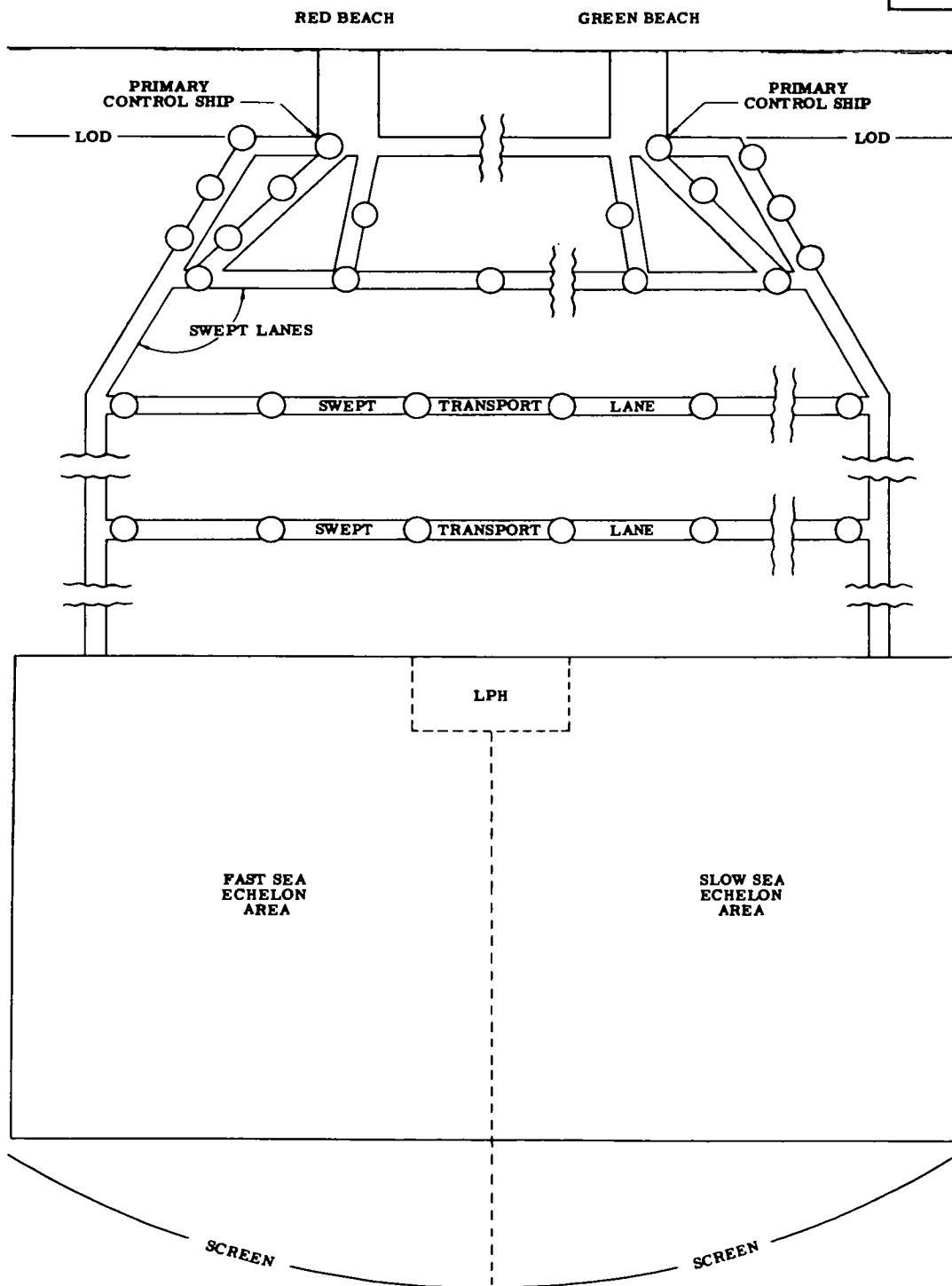
(a) Antisubmarine Screening Area. An area within which the air and surface elements of the area antisubmarine screen operate to protect the amphibious shipping and gunfire support units in support of the assault.

(b) Outer Transport Areas. Areas inside the area antisubmarine screen to which assault transports proceed initially after arrival in the objective area. These areas should provide reasonable protection against weather, and adequate room for maneuver in case of an enemy air or submarine attack. Provision is made during planning for their early establishment directly off the selected landing beaches and at a distance sufficient for transports to take station beyond effective range of hostile shore batteries. Although transports do not necessarily anchor during the early phases, it is desirable that the areas selected have depths of water and character of bottom suitable for ships to anchor if circumstances permit.

(c) Outer Landing Ship Areas. Areas to which landing ships proceed initially after their arrival in the objective area. They are usually located on the flanks of the outer transport areas. The same considerations apply in the selection of outer landing ship areas as apply in the selection of outer transport areas.

TYPICAL POSITIONS AND AREAS ASSIGNED UNITS OFF LANDING BEACHES WHEN SEA ECHELON PLAN IS USED

FIG. 14-1



(d) Inner Transport Areas. Areas as close to the landing beaches as depths of water, navigational hazards, boat traffic, and enemy action permit, to which transports may move to expedite unloading.

(e) Helicopter Transport Areas. Areas to the seaward and on the flanks of the outer transport and landing ship areas, but preferably inside the area screen, to which helicopter transports proceed and launch or recover helicopters. The area is used when wind conditions are such that operations cannot be conducted from regularly assigned stations in the transport area.

(f) Fire Support Areas. Areas in which fire support ships operate while providing gunfire support to the landing force. The areas selected should provide optimum fields of fire, be as close to the shore as depths of water and hazards to navigation permit, and so located that the operations of fire support ships will not hazard or interfere with landing operations.

(g) Control Ship Stations. Stations assigned control ships for controlling the ship-to-shore movement.

(h) Amphibian Vehicle Launching Areas. Areas located in the near vicinity and to seaward of the line of departure to which landing ships proceed and launch amphibian vehicles.

(3) Sea Echelon Plan. This is a plan to implement the requirements of dispersal and reduction of mine countermeasures effort. See Figure 14-1. It includes:

(a) Transport Area. An area assigned to a transport organization for the purpose of debarking troops and equipment. It consists of mineswept lanes, areas, and channels leading from a sea echelon area to the beaches. The maximum number of ships in the transport area is directly limited by dispersion requirements, availability of forces for mine countermeasures, and local hydrography and topography. Landing ship areas, helicopter transport areas, control ship stations, and fire support areas are dispersed within this swept area.

(b) Sea Echelon Area. An area to seaward of a transport area from which assault shipping is phased into the transport area, and to which assault shipping withdraws from the transport area. Determination of the size and location of the sea echelon area for a particular operation is based on:

1. Dispersion as a defense against special weapons attack.
2. Antisubmarine protection.
3. Mine countermeasures effort.

1435 REGULATING POINTS

a. A regulating point is an anchorage, port, or ocean area to which echelons of assault and follow-up shipping proceed on a schedule, and at which they are retained by the amphibious task force commander until needed in the transport area for unloading. It also serves as a rendezvous point to which shipping proceeds, when empty, to await the makeup of a convoy or movement group for movement toward home bases.

b. The passage of designated movement groups may be interrupted by stopping at regulating points where they wait until called forward to the objective area by the amphibious task force commander. In this manner, the congestion of ships in transport areas off assault beaches can be reduced. This contributes greatly to passive defense against weapons of mass destruction.

1436 GEOGRAPHIC REFERENCE POINTS

A complete system of geographic reference points for the objective area and the surrounding ocean area is formulated during planning. The points indicate the routes (particularly where the direction of the routes changes) for one or more corners of each of the areas defined, and for certain locations not related to areas or routes. The reference points are given in code letters, and are defined by exact latitude and longitude.

1440 SECURITY

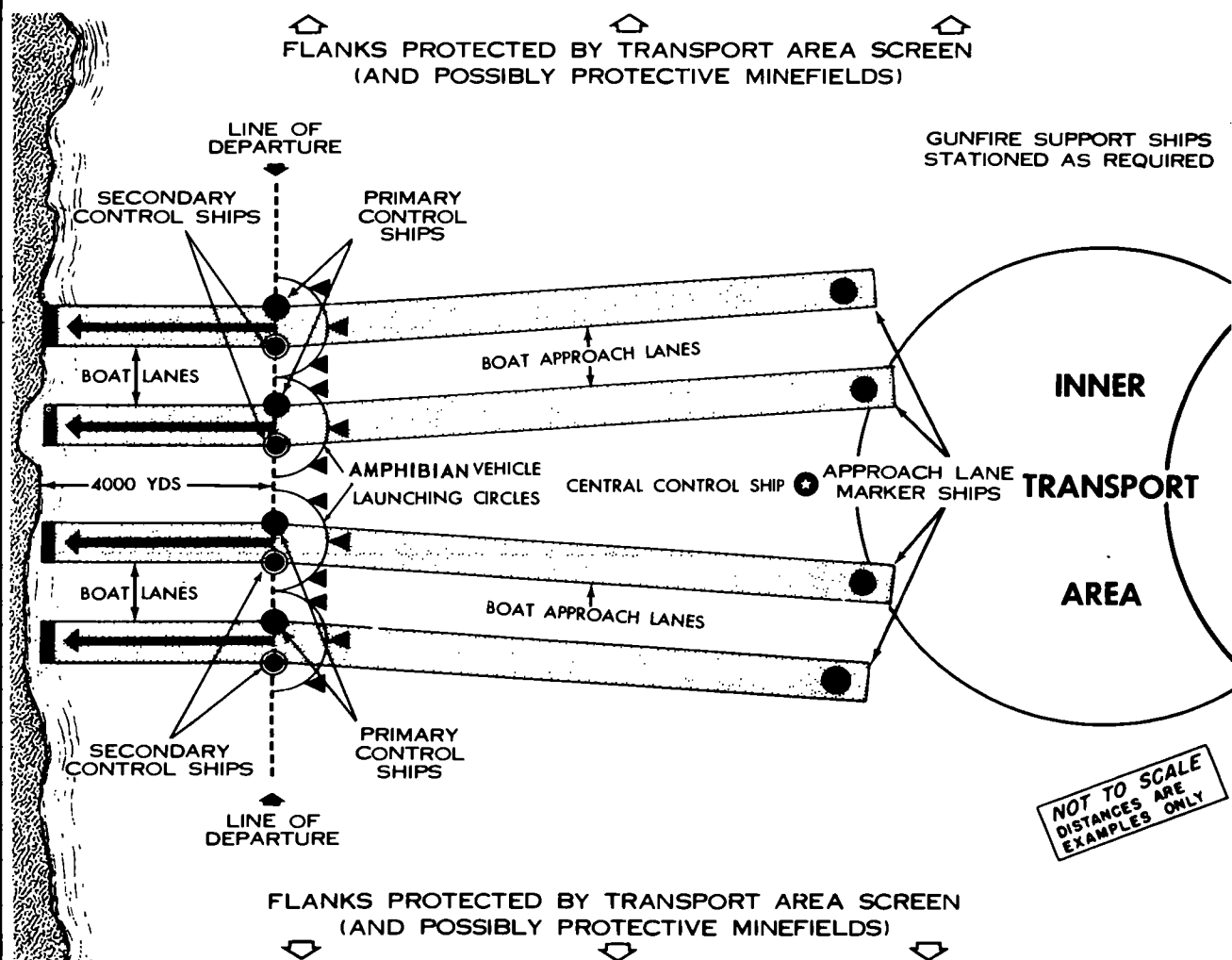
In formulating plans for the movement to the objective, the routes and rendezvous points are carefully selected. Routes through mineable waters, or close to enemy shore installations from which enemy air, submarine, or surface attacks employing conventional or atomic weapons on the movement groups can be readily carried out, are avoided if practicable. To minimize the probability of detection, routes should be planned to avoid known or probable areas of enemy radar surveillance. Latitude must be given in the allocation of transit time to permit evasive courses to be steered by movement groups if it becomes necessary to avoid threats of submarine concentrations or surface attack.

1450 THE PASSAGE AT SEA

An amphibious movement group frequently contains a larger number of ships than is generally present in a nonamphibious organization of naval ships. In

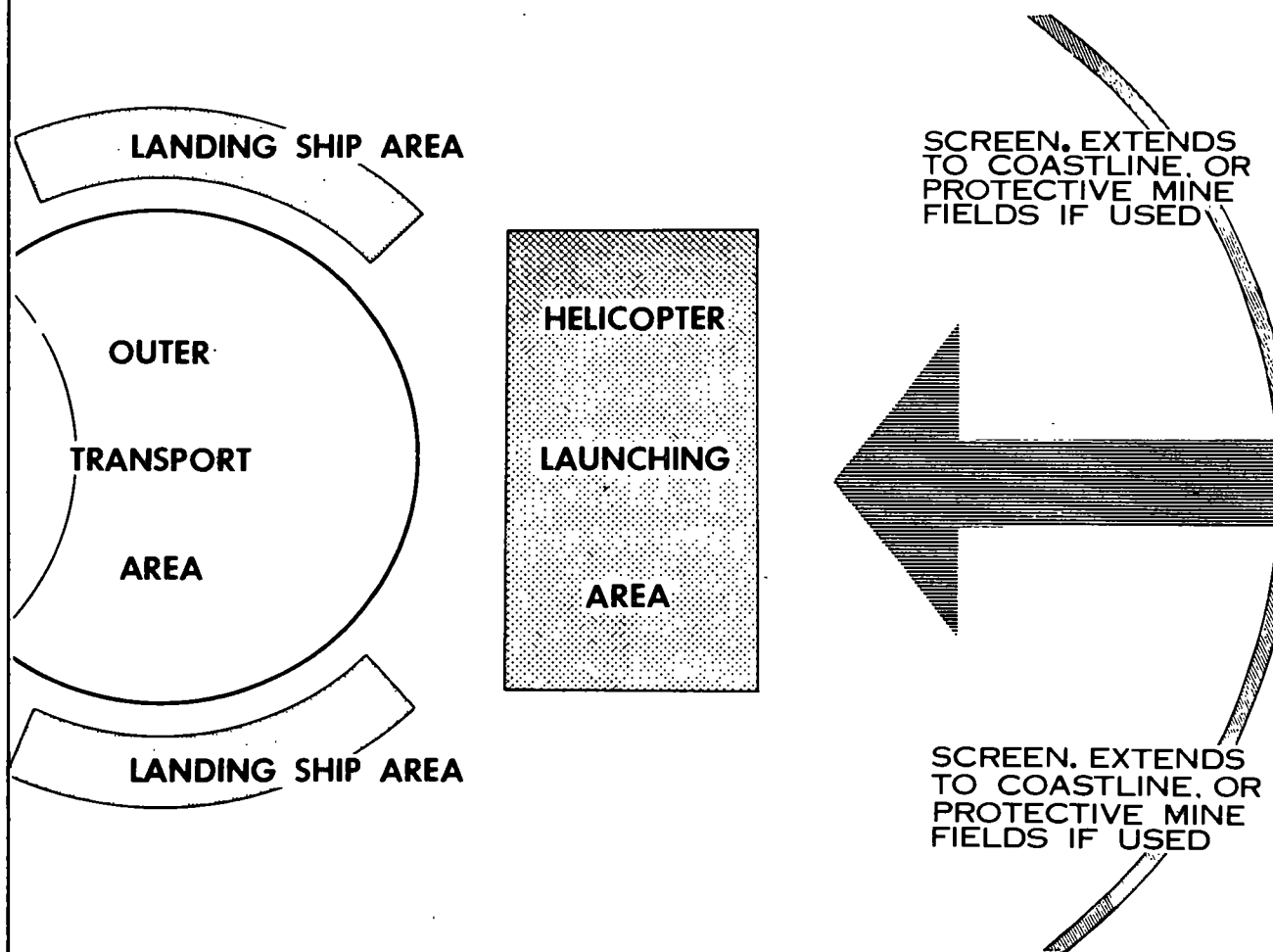
TYPICAL POSITIONS AND AREAS ASSIGNED UNITS OFF LANDING BEACHES WHEN SEA ECHELON PLAN IS NOT USED

FIG. 14-2



TYPICAL POSITIONS AND AREAS ASSIGNED UNITS OFF LANDING BEACHES WHEN SEA ECHELON PLAN IS NOT USED (Cont.)

FIG. 14-2



addition to those described in standard Navy publications, special cruising and maneuvering instructions required for the security of the force and the safety of individual ships may be issued by appropriate commanders, including commanding officers of ships.

1451 NAVIGATIONAL AIDS

a. Because of the exact timing required during passage to the objective area, and because of the necessity of exact positioning of the components of an amphibious task force in the objective area, accurate and precise navigation is mandatory. Special navigational aids are frequently necessary to supplement normal aids. Examples of such special aids are:

(1) Radar reflector buoys to mark swept channels, limits of minefields, and dangers to navigation channel and marker buoys without radar reflectors.

(2) Beacons on shore to mark exact points of land. These are usually placed after the assault, but may be placed prior to that time by reconnaissance parties.

(3) Range beacons and lights to mark channels. They are established ashore as soon as the tactical situation ashore will permit.

(4) Reference ships to guide groups and individual ships to their proper stations in the objective area.

(5) Guide ships to lead groups or ships through dangerous waters.

(6) Corrected charts based upon latest hydrographic surveys.

1452 PROTECTIVE MEASURES EN ROUTE

a. The safety of the amphibious type ships with their embarked troops, equipment, and supplies during movement to the objective, is of paramount importance. The landing force must arrive in the objective area without critical reduction of their combat potential. Measures necessary for protection of the movement groups of an amphibious task force making a passage at sea include all those taken by any naval task organization while cruising at sea. There are, however, additional general measures that must be taken. These are provided by echelons of command above the amphibious task force commander, usually a fleet or area commander. Some of these additional measures are:

(1) Reinforcing air operations against enemy surface, air, or submarine attack, including:

(a) Carrier-based air operations from supporting carrier task forces, to maintain control of the air over the areas through which the movement

groups of the amphibious task force will pass en route to the objective area. This may include providing a combat air patrol for any movement group unable to provide its own patrol.

(b) Land-based air operations, for the purpose stated in subparagraph (a).

(c) Searches to locate enemy forces that might oppose the passage of movement groups.

(d) Antisubmarine patrol, carrier or shore-based

(e) Strikes against enemy surface forces that could oppose the passage of our movement groups

(2) Stationing of supporting surface forces in such locations as may be necessary to intercept enemy surface forces, and in sufficient strength to destroy them.

(3) Stationing of air-surface hunter-killer groups to assist in the destruction of all enemy submarines that are in a position to threaten the movement groups.

(4) Minesweeping to clear channels, if the movement groups must pass through mineable waters during passage.

(5) Protection of supply lines and logistic support groups.

1453 LOGISTICS EN ROUTE

a. The characteristics of amphibious type ships, particularly the smaller types such as control ships, and nonamphibious type ships, such as destroyers and minesweepers, accompanying the movement groups require that special consideration be given to logistics en route. Logistic replenishment may be accomplished at a staging area or at sea. APA's and AKA's normally carry sufficient fuel for limited replenishment of smaller types.

(1) Essential Logistic Practices. Because of the severe demand on logistic services by the various components of the amphibious task force, the following practices should be followed to minimize the logistic tasks:

(a) All ships exercise economy in the use of fresh water. Particular emphasis is laid on instructing all personnel including troops, in the economical use of fresh water.

(b) All ships exercise economy in the use of fuel.

(c) The amphibious task force ships are refueled, if necessary, before entering the objective area.

(d) When practicable and without delaying the passage, ships returning to rear areas because of unforeseen developments transfer as much fuel, water, ammunition, supplies, equipment, and spare parts as is feasible.

(2) The landing force has no major logistic problem during this period. Troops receive subsistence and are provided medical service by the naval ship in which they are embarked. Logistic activity is limited to service and maintenance of equipment, and to modification of supply plans as made necessary by directions of higher authority or changes in the tactical plan. Naval commanders should afford every assistance practicable to embarked troop commanders in the servicing and maintenance of landing force equipment during movement to the objective.

1454 TRAINING EXERCISES EN ROUTE

a. An amphibious task force proceeding toward an objective area conducts such training exercises as are practicable during the passage. Training conducted while a ship is underway is limited to those activities which do not interfere with the ship's operating procedure. Crowded conditions aboard ship require that shipboard routine be highly organized. Consequently, all troop training on board ship must be thoroughly planned, organized, and cleared with ship's commanding officers in order to avoid conflict with other shipboard activities.

(1) Naval Training. Various gunnery, logistic replenishment, and radar exercises may be conducted; simulated air and torpedo attacks on the movement groups countered; defensive maneuvers against surface or atomic attack rehearsed; and signal and other drills executed.

(2) Landing Force Training. While the ships are underway, embarked troops participate in ships emergency drills, and conduct debarkation drills; conduct landing force training as appropriate with particular emphasis on combat orientation, indoctrination, and briefing on the operation; and hold physical drills. Ships provide facilities insofar as they are able to assist the troop training.

1455 COMMUNICATIONS EN ROUTE

a. The amphibious task force commander controls the communications of the amphibious task force during movement to the objective area. This control is delegated to the commander of each movement group, who maintains positive control communications within his particular movement group, including communications of the embarked troops. Electronic silence conditions are normally imposed as required during movement to the objective area.

b. Radio transmitters or receivers must not be operated for drill, test, or other purposes until security restrictions are removed, or without specific permission of the movement group commander. The

test and repair of equipment may be permitted by ship commanding officers, provided that positive measures are taken to prevent radiation going beyond the ship's hull. Provisions are made whenever practicable for helicopter or fast-ship guard mail and messenger service within movement groups, and for air delivery to flagships of other movement groups by carrier aircraft or seaplane. Within their capabilities, naval forces are responsible for providing communications required by the landing force.

1456 COORDINATION DURING PASSAGE

a. In amphibious operation, the forces not a part of but supporting the amphibious task force coordinate their operations with the passages of the various movement groups of the amphibious task force to the objective area. This coordination is provided for in the plans of an authority superior to the amphibious task force commander, usually a fleet or area commander.

b. The amphibious task force commander and subordinate commanders implement these plans. Individual commanders must remain aware of the need for maintaining the schedule and proceeding along the prescribed routes. If deviation is required, the commander of the group determines whether to break radio silence in order to advise other commands of the situation. In certain situations, there may be serious consequences if friendly land- or carrier-based search aircraft contact a force in a position which was not indicated in the pilots' briefing. All commanders must be fully cognizant of the general scheme and area of operations of other forces.

1460 THE APPROACH

a. The approach to the objective includes the arrival of the various movement groups in the vicinity of the objective area, deployment of movement groups from the cruising formations, re-forming as necessary according to assigned tasks, and proceeding to the designated positions in the objective area. Frequently the final approach and deployment are made under cover of darkness. During this critical period, protective measures are taken in addition to those during the passage. These provisions encompass:

(1) Special air defense measures which include timely air strikes against airfields within range.

(2) Provision for location and destruction of enemy minefields and shore batteries which can interfere with the approach

(3) Selection of approach routes which avoid lengthy exposure to fire from enemy shore batteries

(4) Provision of antisubmarine and anti-small-boat screens, and procedures for their establishment, as well as the intensification of other antisubmarine operations.

1461 ADVANCE FORCE

a. During passage to the objective area, if the advance force is proceeding in more than one movement group, the various movement groups remain as close to each other as their missions, the tactical situation, and the differences in their speeds will permit. The movement groups usually arrive in the vicinity of the objective area at night, in order that they may reach their assigned positions in the objective area under cover of darkness or during early daylight hours. Tactical considerations applicable to the approach of an advance force are:

(1) Deployment. It is necessary, in most cases, for the movement groups of an advance force to break up into component parts for the final stage of the approach, since each component normally has a specific task to perform, a particular route to follow, and a definite time to arrive at its station.

(2) Special Approach Formation. Each movement group usually takes a special approach formation during daylight on the day preceding arrival in the vicinity of the objective area, in order to facilitate the breaking off of components during darkness for the final approach

(3) During Darkness. When components break off during darkness, they proceed to their assigned stations via specifically prescribed routes.

(4) Mineable Waters. In some cases, the final stages of the approach may be through mineable waters, and appropriate mine countermeasures are taken. Special formations for passage through mineable waters and swept channels may be necessary.

1462 MAIN BODY

The approach of the main body of an amphibious task force is usually more complicated than that of the advance force, because a larger number of ships is involved and because the arrival of the main body must be carefully timed relative to H-hour. However, if an advance force has been employed, the protective measures for the main body during the approach are generally somewhat easier to effect, since the advance force will have been in the area

for some days previous and will, therefore, have had time to take many of the necessary protective measures. In particular, the minesweepers of the advance force will have swept enough of the objective area to permit the main body of the amphibious task force to approach with smaller risk. Tactical considerations applicable to the approach of an advance force, described in the preceding article, are also applicable to the approach of the main body of the amphibious task force.

1463 DEMONSTRATION FORCE

The same considerations and tactics apply to the approach of the demonstration force as to the approach of the main body.

1464 LATER ECHELONS OF THE MAIN BODY

If the main body of the amphibious task force arrives in the objective area in successive echelons, the later echelons may arrive on a time schedule or may remain in a specific operating area until called forward by the amphibious task force commander as requested by the landing force commander.

1465 COORDINATION DURING APPROACH

a. Proper coordination and timing is of utmost importance in the final stages of the approach of all components of each movement group, in order to prevent interference between components and to permit each to arrive at its position in the objective area at the proper time to commence its task. Careful, precise, and accurate navigation is essential. During the approach, additional complication for the main body may be caused by the presence of an advance force already in the objective area. It is the responsibility of the advance force commander to ensure that components of his command do not interfere with the approach of the main body of the amphibious task force.

b. When the amphibious task force is composed of two or more attack groups, the amphibious task force commander coordinates the approach of the various attack groups but the movements of each individual attack group are the responsibility of the attack group commander.

CHAPTER 15

PREASSAULT OPERATIONS

CONTENTS

1500 PURPOSE AND SCOPE

1510 DECEPTION

1520 OPERATIONS PRIOR TO ARRIVAL OF ADVANCE FORCE

1530 ADVANCE FORCE OPERATIONS

1531 Decision to Employ an Advance Force

1532 Responsibilities for Planning Advance Force Operations

1533 Tasks to be Accomplished by the Advance Force

1534 Considerations in Planning Advance Force Operations

1535 Supporting Arms

1536 Coordination with Other Forces

1537 Protection of the Advance Force

1540 DISSEMINATION OF INTELLIGENCE

1550 EVALUATION

CHAPTER 15

PREASSAULT OPERATIONS

1500 PURPOSE AND SCOPE

a. Operations, preparatory to an amphibious operation, are conducted for the following purposes.

- (1) To isolate the objective area.
- (2) To gain information of the enemy.
- (3) To prepare the objective area.

b. Preassault operations are those operations conducted in the objective area by subordinate elements of the amphibious task force which are normally organized into an advance force. However, while this chapter treats preassault operations, it is recognized that related supporting operations may be conducted by other fleet and theater forces prior to the arrival of the advance force (see article 105). Since such supporting operations contribute to the preparation for the amphibious assault, they should be responsive to the requirements of the amphibious task force. Therefore, articles 1510 and 1520 contain considerations applicable to such supporting operations although they are not a part of the amphibious operation.

1510 DECEPTION

a. The operations of all forces, prior to arrival of the main body of the amphibious task force in the objective area, should be conducted so as to avoid disclosure of the selected objective (Strategic Deception) and landing areas (Tactical Deception).

(1) Strategic Deception.

(a) Strategic deception is conducted under the direction of a commander superior to the amphibious task force commander. However, the latter, having made appropriate recommendations in regard to the deceptive operations required to support the amphibious task force, is kept informed of their progress.

(b) Operations to achieve strategic deception are sometimes based on intentional disclosures of information of operations not intended for execution, and may include embarkation, rehearsal, and departure therefor. Actual operations for purposes of strategic deception, such as bombing and bombardment, are conducted over a wide area with the same intensity at several points. Sometimes, in order to create an incorrect reaction, there is a

complete omission of attacks on certain areas for as long a period as the situation will permit.

(2) Tactical Deception. Tactical deception is usually accomplished by the advance force or the main body of the amphibious task force.

1520 OPERATIONS PRIOR TO ARRIVAL OF ADVANCE FORCE

a. Requirements. The nature of a specific amphibious operation may impose certain requirements which cannot be met by the forces assigned to the amphibious task force commander. To ensure that all his requirements are fulfilled, the amphibious task force commander submits requests to higher authority for accomplishment of tasks by forces not a part of the amphibious task force. These operations are undertaken on direction of the fleet or theater commander prior to the arrival of the advance force, or prior to the arrival of the main body of the amphibious task force if an advance force is not employed.

b. Responsibilities for Planning.

(1) The landing force commander and commanders of other major elements of the amphibious task force are responsible for the preparation of their requirements for preassault operations, and for the submission of those requirements to the amphibious task force commander.

(2) The amphibious task force commander is responsible for the consolidation of requirements of all elements of the amphibious task force, and forwarding those requirements that cannot be fulfilled by his own forces to higher authority for accomplishment.

c. Tasks. Any or all of the tasks discussed below may be accomplished prior to the arrival of the advance force.

(1) Isolation and Attainment of Superiority. Isolation of the objective area is accomplished primarily by air operations designed to sever lines of communications. However, bombardment of enemy installations by naval gunfire, and sinking of enemy shipping by surface or submarine attacks, also contribute to isolation. Air, surface, and subsurface superiority is attained by bombardment, surface and air sweeps, and antisubmarine operations. Destruction or neutral-

ization of distant enemy forces that threaten the amphibious task force, including the advance force, provides freedom from enemy interference while the task force is en route to the objective area.

(2) **Destruction of Specific Targets.** Destruction of specific targets in the objective area may be undertaken by air and naval gunfire, by raids, and/or through clandestine operations. Raids and clandestine operations may be undertaken by units or individuals transported by surface, subsurface, and air means.

(3) **Harassment.** Harassment by air and naval gunfire bombardment, and by other operations serves to confuse the enemy and to impede his defense efforts.

(4) **Psychological Warfare.** Reduction, by psychological means, of the enemy's will to resist is accomplished as appropriate and feasible. Examples are the use of leaflets and radio broadcasts.

(5) **Collection of Enemy Information.** Information about the objective area and enemy installations and dispositions may be obtained by:

(a) Aerial photography, submarine periscope photography, and photography from the decks of surface ships.

(b) Surveys made by underwater demolition teams operating from submarines or surface ships.

(c) Operations of amphibious reconnaissance patrols and amphibious raids.

(d) Operations of friendly agents in enemy territory.

(e) Electronics intercept and direction finding.

(f) Visual aerial reconnaissance.

(6) **Destruction or Neutralization of Distant Forces.** Destruction or neutralization of distant forces and installations, which will contribute to the success of the assault, may be accomplished. Such operations may include attack on submarine bases, cargo assembly points, troop installations or distant naval and air bases.

1530 ADVANCE FORCE OPERATIONS

An advance force is a temporary organization within the amphibious task force. It is usually dissolved on D-day when the main body of the amphibious task force arrives in the objective area. At this time the various elements of the advance force are assigned or reassigned to other parts of the amphibious task force. The composition and functions of an advance force are set forth in Chapter 2.

1531 DECISION TO EMPLOY AN ADVANCE FORCE

a. If not made by higher authority, the decision to employ an advance force is made early in the planning phase by the amphibious task force commander, after consultation with the landing force commander. The decision is made after weighing the relative advantages of strategic and/or tactical surprise and requirements for preparation of the objective area.

(1) Surprise.

(a) Complete strategic surprise is difficult to attain against an alert enemy, because hostile air and submarine reconnaissance, and our own preliminary reconnaissance and bombardment all militate against it. The prospects of achieving strategic surprise will decrease with efforts to isolate the objective area.

(b) Tactical surprise also may be difficult to attain when the objective is a small geographic locality. Against large land masses, however, tactical surprise may be achieved, regardless of the intent shown by the preassault preparation of the objective area. These preassault operations should cover areas in addition to those selected for the landing. Amphibious task force movements and their timing should not indicate the areas toward which the attack is directed until the ship-to-shore movement actually commences. Tactical surprise, while desirable, may not always be necessary if the effectiveness of the preparation is sufficient to offset the disadvantages incurred by the loss of surprise.

(c) When surprise is a principal consideration for success but is not attained, severe losses and possible failure may result. Consequently the commander must, in all cases, weigh carefully this possibility against the known advantages of a thorough preparation of the objective area by a properly constituted advance force.

(2) **Preparation of the Objective Area.** The extent of enemy fixed defenses, including mines, beach and helicopter landing zone obstacles, and shore defenses, must be taken into account.

(a) When the landing area selected is extensively organized for defense, the offshore areas heavily mined, and when the main defending forces are occupying fixed defenses with corresponding light reserves, advance force operations are indicated.

(b) When the landing area selected is lightly defended and the main defending force is held in reserve, the advantage of conducting advance force operations for the purpose of destruction is weighed against the disadvantage of disclosing

the selected landing area. Unless the objective area can be isolated and reinforcements excluded, the enemy ground forces may build up their local strength rapidly during advance force operations, regardless of the destructive and disruptive effects of the attacks. Under these conditions, pre-D-day operations are directed toward attacking the enemy troops, destroying enemy reserves, and creating bottlenecks in the enemy communication nets.

1532 RESPONSIBILITIES FOR PLANNING ADVANCE FORCE OPERATIONS

a. After the decision to employ an advance force has been made, the planning responsibilities of the various commanders are:

(1) The landing force commander is responsible for the preparation of troop requirements for naval gunfire, air bombardment, pre-D-day seizure of supporting positions, demonstrations and reconnaissance, and for the submission of these requirements to the amphibious task force commander. The landing force commander is also responsible for indicating the troop staff representation he desires to accompany the advance force commander. If pre-D-day landings or demonstrations are to be conducted, the landing force commander will direct the landing group commander of the advance force to report to the advance force commander for planning.

(2) The amphibious task force commander is responsible for consolidating the requirements of the landing force, with those of the other elements of the amphibious task force, and for issuing directives to the advance force commander to prepare the detailed plans for operations of the advance force. The amphibious task force commander reviews the detailed plans of the advance force to ensure that they meet his over-all requirements.

(3) The advance force commander is responsible for the detailed planning for operations of his force. He ensures that his plans will fulfill the over-all requirements of the amphibious task force. He prepares naval gunfire, air bombardment, mine-sweeping, landing site reconnaissance, underwater demolition and (if required) mine and net laying, and pre-D-day landing plans. Any landings or demonstrations to be conducted are planned in consultation with the landing group commander of the advance force. In this planning, the advance force commander follows the same procedures the amphibious task force commander observes when planning the main landing.

(4) The landing group commander, when the advance force includes a landing group, plans his

operations in conjunction with the advance force commander, following the same procedures the landing force commander observes when planning the main landing.

1533 TASKS TO BE ACCOMPLISHED BY THE ADVANCE FORCE

a. Tasks to be accomplished by the advance force may include any or all of the following:

(1) Destruction of Defenses Ashore. The advance force destroys beach and landing zone defenses, gun emplacements, control and observation posts, and any other installations which could be used by the enemy in opposing the surface and helicopter-borne assaults. Naval gunfire, air bombardment and artillery, if emplaced, are utilized for the destruction of enemy facilities.

(2) Preparation of Sea Areas. The advance force prepares the sea areas in the objective area for amphibious operations by minesweeping, minelaying, hydrographic surveys, and net laying, as necessary.

(3) Preparation of Beaches and Beach Approaches. The advance force prepares the beaches for landing and the approaches to the beaches for passage of landing craft, landing ships, and amphibian vehicles. All natural or man-made obstacles, including mines, which make passage and landing hazardous are destroyed. Underwater demolition teams accomplish destruction, removal, or marking of such obstacles in the sea approaches to and on selected beaches between the 3-fathom curve and the high-water line. The landing force maintains liaison with the underwater demolition teams to obtain first-hand information on the landing beaches and beach approaches. In certain situations, at the request of the landing force commander, underwater demolition team personnel may assist in the removal of land mines and obstacles on the beaches above the high-water line.

(4) Beach Reconnaissance. Beach reconnaissance is conducted by the advance force to collect the latest possible detailed information on beach gradients, obstacles (natural and man-made), tide and surf, depths of water, contour of the sea bottom, routes of exit from the beaches, soil trafficability, beach defenses, and suitability of the selected beaches for landing. Beach reconnaissance is usually performed by underwater demolition teams. However, such reconnaissance may be accomplished in conjunction with landing force reconnaissance units, or by the latter alone.

(5) Isolation of the Objective, and Attainment and Maintenance of Local Air Superiority. Attacks by air and naval gunfire and amphibious raids are

made, when required, against airfields, aircraft, communications and supply centers, shipping, and other critical targets, to isolate the objective and attain and/or maintain local air superiority.

(6) Pre-D-Day Landings. Pre-D-day landings may be executed for reconnaissance, destruction, or harassment purposes; to capture off-shore islands or promontories for the establishment of artillery, navigation aids, radar stations, or logistic bases; or for other reasons. Helicopter-borne troop units or airborne units may be employed effectively to accomplish these pre-D-day missions including the reconnaissance of helicopter landing zones and drop zones. Such landings are usually executed in the same manner as the main landings, described in the next chapter.

(7) Demonstrations. Demonstrations may be conducted to deceive and confuse the enemy.

(8) Electronics Countermeasures. The advance force obtains maximum information of the enemy's communications and electronic facilities in, and adjacent to, the objective area. During advance force operations, these facilities are neutralized or destroyed in order to prepare the objective area for assault. Before destruction is ordered, due consideration must be given to the following:

(a) Intelligence which may be gained through interception of enemy communications; and

(b) Possible use of enemy facilities in the objective area, which may be captured by the landing force.

1534 CONSIDERATIONS IN PLANNING ADVANCE FORCE OPERATIONS

a. In the preparation of his plans, the advance force commander considers the following:

(1) Sufficiency of means assigned to him by the amphibious task force commander for the accomplishment of the advance force mission.

(2) Enemy air, surface and sub-surface attack capabilities.

(3) Anticipated enemy counterbattery fires.

(4) Requirements for beach and landing zone preparation, incorporating the detailed troop requirements.

(5) Number, type and priority of targets to be attacked.

(6) Requirements for minesweeping operations.

(7) Requirements for beach and landing zone reconnaissance and underwater demolition operations, including support.

(8) Requirements for defensive minelaying operations.

(9) Requirements for support of any pre-D-day landing to be made.

(10) Necessity for coordination of naval gunfire and air strikes.

(11) Requirements for ammunition supply and replenishment.

(12) Requirement for observing, reporting, evaluating, and taking action on the results of naval gunfire and air strikes.

(13) Provisions for continuous development, utilization, and dissemination of new intelligence and target information obtained from visual, photographic and electronic reconnaissance as well as from other sources.

1535 SUPPORTING ARMS

a. An advance force provides support for its various elements as they accomplish their tasks in preparing the objective area for assault.

(1) Naval Gunfire and Air Support. All elements of an advance force engaged in preparing the objective for assault are provided with naval gunfire and air support as necessary.

(2) Artillery. Advance force operations may include pre-D-day landing of artillery to be employed in positions from which it can support units making pre-D-day or D-day landings.

(3) Control and Coordination

(a) The advance force commander establishes in his flagship an advance force supporting arms coordination center (SACC). The advance force supporting arms coordinator maintains an up-to-date target list to pass on to the SACC of the amphibious task force.

(b) An advance echelon of the landing force fire support coordination center (FSCC) usually accompanies the SACC. The officer in charge of this advance echelon functions as the landing force representative in the SACC during advance force operations. He advises the advance force supporting arms coordinator on landing force fire support matters. He maintains a complete record of all targets discovered and engaged by naval gunfire and air elements of the advance force.

1536 COORDINATION WITH OTHER FORCES

a. The advance force commander coordinates the operation of his force with those of other forces in the same area.

(1) Air. All aircraft operating in the objective area during advance force operations are under the control of the commander of the advance force. In order to avoid confusion and to assure the safety of friendly forces, coordinated planning is necessary between the advance force and other forces whose aircraft may enter the area. Such forces include fast carrier task forces, hunter-killer forces, and

striking and covering forces. Coordinated planning is necessary for strikes, identification, search and rescue, warning, approach to the area, and reconnaissance matters.

(2) Demonstration Forces. Generally, deception plans to be carried out by demonstration forces are made on a higher level. The advance force commander, however, coordinates his efforts with those of such demonstration forces in order to increase the chances for tactical surprise by the main body of the amphibious task force. The plans of the advance force and demonstration forces operating in other areas must be coordinated in order to provide the requisite degree of deception.

(3) Submarine Forces. When friendly submarines operate in the objective area on reconnaissance or search and rescue missions, their operations are coordinated with those of other forces. Recognition, emergency procedures and submarine sanctuaries are prescribed by an authority higher than the amphibious task force commander.

(4) Other Forces. Prior to the arrival of the advance force in the objective area, other forces may have conducted attacks or reconnaissance

therein. The advance force is interested in the results of these missions, and information is provided by such forces to the advance force.

1537 PROTECTION OF THE ADVANCE FORCE

An advance force conducts its own protective operations while en route to, and in, the objective area. These include antisubmarine, air defense and surface defense operations.

1540 DISSEMINATION OF INTELLIGENCE

The advance force commander must disseminate the intelligence he obtains from all sources to the amphibious task force commander and landing force commander. He also transmits the detailed results of his preparation and isolation missions.

1550 EVALUATION

The amphibious task force commander and landing force commander must be kept apprised of the results of all preassault operations in the objective area so that these can be evaluated in the light of the actual assault.



CHAPTER 16

THE ASSAULT

CONTENTS

1600 NATURE OF THE ASSAULT

1601 Scope of the Assault Phase

1610 ORGANIZATION FOR THE ASSAULT

1611 Landing Force Organization

1612 Organization of Navy Forces

1613 Area Organization

1620 CONTROL

1621 Control of Waterborne Assault

1622 Control of the Helicopter-borne Assault

1630 PRELANDING OPERATIONS

1631 Final Preparation of the Landing Area

1632 Final Preparations for the Ship-to-Shore Movement

1640 ASSAULT OPERATIONS

1641 Initiation of the Assault

1642 Ship-to-Shore Movement

1643 Supporting Arms

1650 CAPTURE OF THE BEACHHEAD

1651 Combat Support Units

1652 Landing of Reserves

1660 CONTINUATION OF THE ATTACK

1670 LOGISTICS

1671 Follow-up Shipping

1680 COMMUNICATIONS

1690 INITIATION OF OTHER TASKS DURING THE ASSAULT PHASE

1691 Termination of the Assault Phase

CHAPTER 16

THE ASSAULT

1600 NATURE OF THE ASSAULT

a. This chapter discusses those aspects of the assault phase which are of mutual concern to the Navy force, landing force, and other participating forces. Details of operations which are primarily the responsibility of one of the services or common to other types of operations, are covered in other appropriate service manuals.

b. Capture of the objectives ashore is the task of the landing force. Operations of other elements of the amphibious task force are directed toward supporting the landing force during the assault.. The scheme of maneuver chosen by the landing force commander is the basic factor in determining the pattern of the assault; flexibility of plans and speed in their execution are the essential factors in its conduct.

1601 SCOPE OF THE ASSAULT PHASE

a. The assault phase begins when the assault elements of the main body of the amphibious task force arrive in assigned positions in the objective area and terminates with the accomplishment of the amphibious task force mission. It encompasses:

- (1) Preparation by naval gunfire and air bombardment.
- (2) Ship-to-shore movement of the landing force by helicopters, landing craft, amphibian vehicles and landing ships.
- (3) Landings in landing and drop zones and on beaches by the assault elements of the landing force.
- (4) Operations inland to effect juncture between waterborne, helicopter-borne, airborne and/or air landed assault forces, and to seize the beachhead.
- (5) Provision of logistic, air, and naval gunfire support of the attack by naval forces throughout the assault.
- (6) Landing of remaining landing force elements for the conduct of such operations as may be required to complete the accomplishment of the amphibious task force mission.

1610 ORGANIZATION FOR THE ASSAULT

The organization for the amphibious assault is based on the parallel organization of the landing force and the naval forces which transport, land

and support the landing force. The landing force organization for landing is the specific tactical grouping of forces for the assault. The tactical unity of the assault elements is maintained insofar as practicable during the ship-to-shore movement. The corresponding organization afloat must parallel that of the troops to facilitate execution of the landing plan and the scheme of maneuver ashore.

1611 LANDING FORCE ORGANIZATION

a. The battalion landing team or equivalent formation is the basic task organization of the landing force for the movement from ship to shore. It consists of an infantry battalion or similar unit reinforced by such supporting units as may be attached for the assault. It may include other units attached for landing. The battalion landing team should be differentiated from the embarkation team, which is an administrative grouping of forces for the overseas movement.

(1) Waterborne landing teams are organized into waves containing the personnel and equipment which are to be landed simultaneously. The troop elements of each wave are commanded by the senior troop commander boated in that wave. The troops boated in a landing craft or amphibian vehicle comprise one boat team. The boat team commander is the senior troop officer or noncommissioned officer aboard. This organization is applicable whether the water-borne landing team is transported in amphibian vehicles of the landing force or landing craft of the Navy.

(2) Helicopter-borne landing teams are organized into helicopter waves. These waves contain the personnel and equipment which are to be landed in the same landing zone at approximately the same time. Waves are composed of helicopter teams (heliteams) each consisting of the personnel and equipment carried by one helicopter in one flight. The helicopter units which transport the landing team are tactically organized into flight increments (waves and flights). For a detailed discussion of landing force organization for helicopter-borne operations see appropriate Landing Force Manual.

(3) Airborne or air-transported assault forces may be landed by parachute, transport aircraft, or seaplane. For detailed explanation of the organization of airborne, air transported, and troop carrier units see appropriate service publications.

1612 ORGANIZATION OF NAVY FORCES

a. The organization of the forces afloat provides the assault transport group(s) for the helicopter and surface assault and includes the necessary control and landing craft organization.

(1) The transport (APA/LPH/LPD) normally is the basic unit of the assault shipping. The battalion landing team or similar unit is normally embarked in one of these types. In some cases, battalion landing teams may be landed in assault from landing ships, either directly on the beach, or by amphibian vehicles organic to the landing force.

(2) The landing ships, landing craft and amphibian vehicles are organized to correspond to the tactical organization of troops. They must be so organized as to ensure control and maneuverability. The organization includes boat waves, boat groups, and boat flotillas.

(a) The boat group is the basic organization of landing craft. One boat group is organized for each battalion landing team (or equivalent) to be landed in the first trip of landing craft or amphibian vehicles. The personnel required to command and operate a boat group are the boat group commander, assistant boat group commander, wave commanders, wave guide officers (for amphibian vehicle waves), an officer, petty officer or noncommissioned officer designated as boat officer to command each landing craft or amphibian vehicle not carrying one of the above officers, and crews and necessary communications personnel.

(b) A boat wave consists of the landing craft or amphibian vehicles within a boat group which carry the troops that are to be landed simultaneously. The organization into waves facilitates the control of the boat group as a whole, for it permits the group commander to exercise command through wave commanders rather than dealing directly with individual landing craft or amphibian vehicles. During the ship-to-shore movement, the boat wave operates as a unit and is maneuvered by the boat wave commander. The boat group lands in successive waves in accordance with pre-arranged plans. For assault purposes, waves are numbered successively from front to rear as first wave, second wave, etc. When landing ships are used to land BLTs or their equivalent in assault by beaching they are organized as waves but are not included in a boat group.

(c) The boat flotilla is an organization of two or more boat groups organized to facilitate control when the operation of two or more boat groups demands the presence of a common commander.

1613 AREA ORGANIZATION

a. Certain sea and inland areas in the objective area are selected to meet tactical requirements and to facilitate the control of the ship-to-shore movement. The amphibious task force commander, in coordination with the landing force commander selects the location of sea operating areas and, within these, the routes, stations, berths and operating areas for the assault shipping, landing craft and amphibian vehicles. The landing force commander selects the location of certain operating areas inland, to include helicopter landing zones and drop zones, in accordance with the scheme of maneuver. The landing force commander and the amphibious task force commander, in coordination, select the necessary approach and retirement lanes, check points, rendezvous areas, and terrestrial aids to navigation in order to facilitate the movement of air dropped or landed troops.

(1) Sea Areas. The general organization of the sea areas is described in Chapter 14. A discussion of the terms relevant to the organization of the sea area close to the shore accomplished during planning is set forth below. The various areas, routes, stations and berths are essentially coordination and control devices, and the extent to which they are used will vary with the nature and scope of the operation.

(a) The line of departure is a designated line off-shore approximately parallel to the landing beach from which the successive boat waves are dispatched for their final movement to the beach. If beaches are separated, each beach has its own line of departure, which is marked by a ship or ships of the control organization. The location of the line of departure is governed by topographic, hydrographic, and tactical considerations.

(b) Boat lanes extend seaward from landing beaches to the line of departure. The width of the boat lanes is determined by the length of the corresponding beaches.

(c) Approach lanes are extensions of boat lanes from the line of departure toward the transport area. They may be terminated by marker ships, boats, or buoys. Adjacent approach lanes may be parallel or may diverge to seaward to provide for early dispersion of the boat waves.

(d) A floating dump area is an off-shore area in which are stationed a designated number of landing craft or amphibian vehicles, loaded with supplies to meet early demands of the troops ashore. A floating dump area should be located in the vicinity of the line of departure, with regard for adequate dispersion and ease in control.

(e) Special unloading berths into which transports may move for unloading are established in the vicinity of the approach lanes. This results in reduction of the running time of landing craft and amphibian vehicles and assists in the dispersion of transports.

(f) A casualty evacuation control berth is established for a ship which may be specially equipped for handling casualties. Usually this is a landing ship in which a casualty evacuation control officer is embarked. Normally one berth is allotted to each colored beach and is located between numbered beaches and as close to the beach as conditions permit.

(g) The transfer line is a designated line to seaward of the surf line, off a landing beach, where personnel and material are transferred from landing craft to amphibian vehicles. It is established when troop plans, terrain, or hydrographic conditions dictate.

(h) A transfer berth is located off a landing beach in the proximity of the transfer line. A crane-equipped ship or a barge is stationed here to transfer troops, supplies and equipment from landing craft to amphibian vehicles.

(i) The amphibian vehicle launching area is a designated area located in the near vicinity and to seaward of the line of departure. The ships carrying amphibian vehicles move into this area to unload them. The area should be so located in relation to the line of departure as to ensure a minimum amount of maneuver and sea area transit by the amphibian vehicles prior to crossing the line of departure.

(j) The causeway launching area is an area located near the line of departure but normally clear of the approach lanes, where ships can launch pontoon causeways. This area must be so located that the causeways can be launched in a minimum amount of time and with least interference from other units participating in the immediate area.

(2) Inland Areas. Inland areas involved in an amphibious operation utilizing helicopter borne and/or air transported forces include corresponding helicopter landing zones and/or drop zones.

(a) A helicopter landing zone is a specified zone within an objective area used for the landing of helicopters.

(b) A drop zone is a specified area upon which airborne troops, equipment, and supplies are dropped by parachute, or upon which supplies and equipment may be delivered by free fall.

b. For further discussion of terms relevant to helicopter landing zones and drop zones see appropriate LFM (USMC) and service publications.

1620 CONTROL

a. The amphibious task force commander is responsible for control of the ship-to-shore movement of both waterborne and helicopter-borne assault forces.

b. Initially, the ship-to-shore movement for both waterborne and helicopter-borne assault forces is centrally controlled in order to permit coordination of support with the landing of assault elements. Later, as circumstances permit, control of the waterborne movement is decentralized for efficient and rapid handling. The helicopter-borne movement, however, remains under centralized control.

c. The system for the control of the ship-to-shore movement is governed by the landing force plan for landing. The maximum area over which effective centralized control of the ship-to-shore movement may be exercised varies in each situation and is, in large part, governed by communication capabilities.

d. The control system must provide the means for rapid fulfillment of landing force requirements during the ship-to-shore movement. Standby control means are kept available so that casualties can be replaced rapidly.

1621 CONTROL OF WATERBORNE ASSAULT

a. Control of assault waves of landing ships, landing craft, and amphibian vehicles from the transport and landing ship areas to the beaches is exercised through a Navy control group. The organization of the control group is based on the arrangement and number of beaches on which the amphibious task force is to land the landing force.

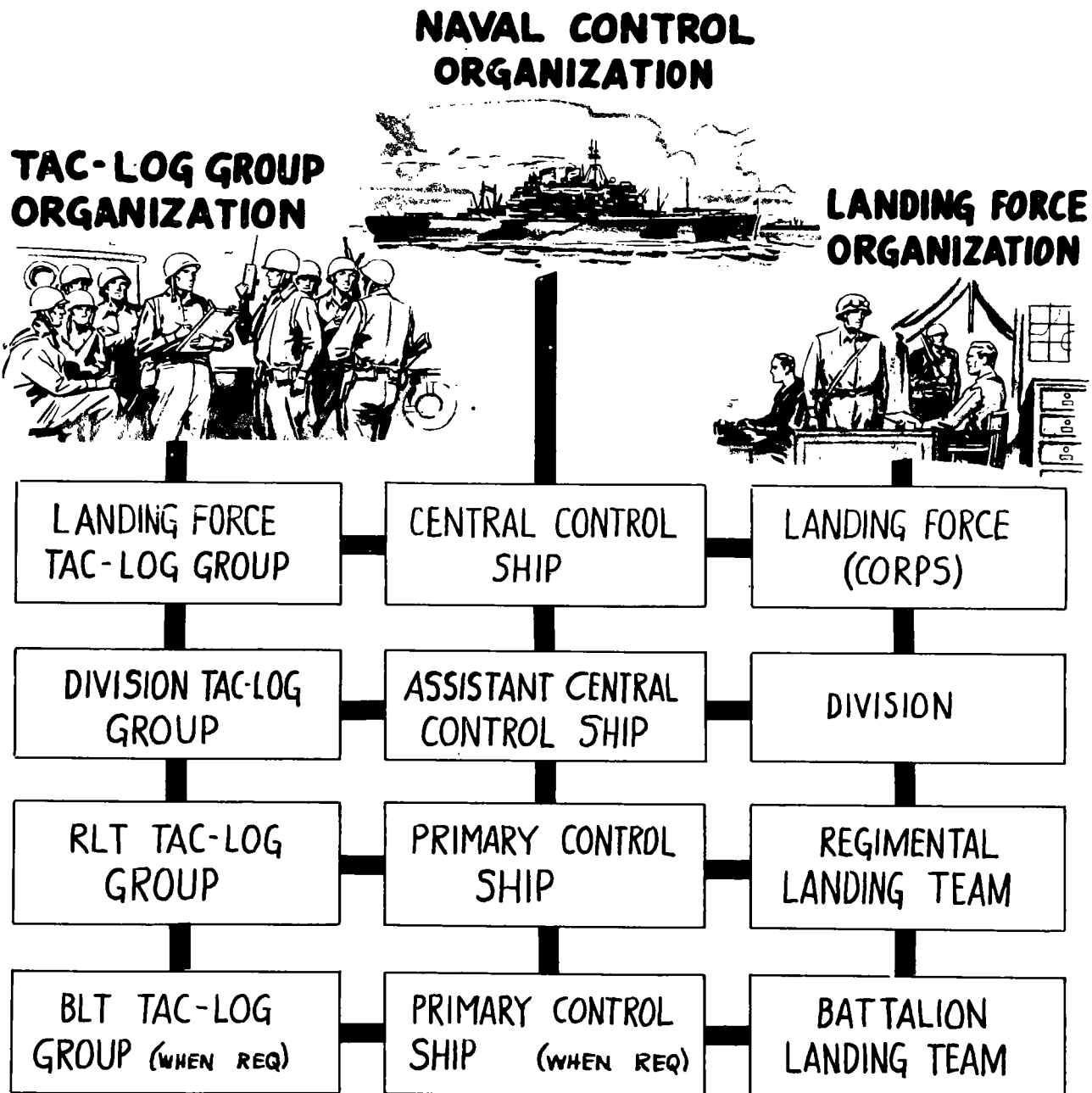
(1) Control officers and control ships are designated by the amphibious task force and transport group commanders for their respective levels of command. The control organization parallels the landing force organization for assault and may include:

(a) The central (force) control officer, designated by the amphibious task force commander for over-all coordination embarked in the central control ship.

(b) An assistant central control officer for each transport organization landing an assault division when two or more divisions are landing simultaneously. Assistant central control officers are embarked in assistant central control ships. They coordinate, as necessary, the movement of landing craft, amphibian vehicles, and landing ships to their respective beaches.

TYPICAL TAC-LOG GROUP ASSIGNMENTS

FIG. 16-1



(c) A primary control officer for each transport organization landing an assault regimental landing team or equivalent formation. Primary control officers are embarked in primary control ships. They control the movement of landing craft, amphibian vehicles, and landing ships to and from the beaches. When assault BLTs or equivalent units are to be landed over widely separated beaches, a primary control officer may be required for each BLT beach.

(d) Secondary control officers, embarked in secondary control ships, stationed on the line of departure to assist the primary control officer.

(e) Approach lane control officers, embarked in approach lane marker ships, stationed at the seaward end of the approach lanes. They control the movement of the waves between the seaward end of the approach lane and the line of departure. When amphibian vehicles are used in the ship-to-shore movement, they normally are launched near the line of departure and do not come under the control of the approach lane control officers.

(f) Boat group commanders, embarked in landing craft. They are in command of all boats of their boat groups from the time the boats are lowered, or they report until their last organized wave has landed. Each boat group commander operates initially under the commanding officer of his respective assault transport. After reporting to the control organization, each boat group commander operates under the direction of the primary control officer until all waves of his boat group have landed.

(g) Assistant boat group commanders embarked in landing craft. They assist the boat group commanders in their duties.

(h) Wave commanders embarked in landing craft and amphibian vehicles. These officers form the waves and, under the direction of the boat group commander, control all subsequent movements of the waves.

(i) Wave guides embarked in wave guide boats when amphibian vehicles are used. They assist in the navigation of amphibian vehicles to the beach.

(j) Casualty evacuation control officers initially embarked in control ships and, where the situation permits, transferred to specially designed evacuation control ships located off the landing beaches. These officers control the evacuation from their assigned beaches.

(2) Tactical-Logistical Group. A tactical-logistical group (TacLog Group) is organized from personnel within the landing force to advise control officers promptly of landing force requirements during the ship-to-shore movement. TacLog groups are not ordinarily assigned to secondary control

ships but serve on all others above that level. A typical TacLog group assignment is shown in Figure 16-1.

1622 CONTROL OF THE HELICOPTER-BORNE ASSAULT

a. Helicopter transport units employed in the ship-to-shore movement are subordinate elements of the landing force. These units execute the ship-to-shore movement in accordance with the Amphibious Task Force Commander's plans for landing and for control which, in turn, are established on the basis of landing force requirements. Plans include provisions for reversion of control of helicopter operations to the landing force commander when the situation ashore permits.

(1) Control of the Ship-to-Shore Movement. During the ship-to-shore movement the amphibious task force commander controls helicopter operations through the tactical air control center (TACC). The control of the helicopter ship-to-shore movement is further decentralized to the helicopter direction center (HDC), a subordinate control agency of the tactical air control center. Control of the ship-to-shore movement is exercised in the following manner:

(a) Individual ships control the launching of their embarked helicopters and direct them to flight rendezvous points located in the immediate vicinity of each ship. After the flight has assembled at the assigned rendezvous point the parent ship then directs the flight leader with his flight to proceed to a wave rendezvous point where it forms, as required by plan, with flights from other ships into a helicopter wave.

(b) From the wave rendezvous points, the HDC vectors waves to the departure point located at the seaward end of the helicopter approach lane system. For scheduled waves, this is done in accordance with the time schedule in the employment and assault landing table. From this point, waves are dispatched along the selected approach lane to the initial point, located at the inland terminus of the approach lane in the vicinity of the landing zone.

(c) Helicopter waves remain in the approach lane from one air control point to the next. Tactical air coordinator(s) (airborne) assist the HDC in directing the maneuver of helicopter waves to designated landing zones and return.

(d) Upon arrival at the initial point, the wave leader reports to the HDC, deploys into landing formation and proceeds to the landing zone.

(e) Immediately after discharging their loads, helicopters rendezvous by flights and proceed via the retirement route to a break-up point near their

parent ship. At this point helicopters are released by the HDC to return to their ship or are dispatched for other use.

(2) Tactical-Logistical Group. A tactical-logistical group normally is established aboard each helicopter transport. These groups consist of representative(s) from the appropriate landing force elements embarked. They assist naval control officers in the ship-to-shore movement of troops, equipment and supplies. TacLog Groups monitor logistic and tactical nets as necessary to maintain information on landing force requirements. They are normally located in the vicinity of each ship CIC, the HDC, and the TACC as appropriate.

1630 PRELANDING OPERATIONS

The initial events of the assault phase commence when the main body of the amphibious task force arrives in the objective area. They encompass:

(1) Continuation of similar preparation by an advance force (if the latter is employed) and; (2) Final preparation for the ship-to-shore movement. These operations are discussed in the following paragraphs.

1631 FINAL PREPARATION OF THE LANDING AREA

a. The final preparation of the landing area encompasses the following operations:

(1) Minesweeping. The minesweeping units carry out their assigned mission with special emphasis on ensuring the clearance of mines in the transport and fire support areas and in the sea approaches to the landing beaches.

(2) Underwater Demolition Team Operations. Underwater demolition teams verify existing information, obtain last-minute information, and assist the assault landings by performance of as many of the following tasks as are assigned.

(a) Hydrographic reconnaissance of the landing beaches and seaward approaches thereto.

(b) Demolition of natural and man-made obstacles.

(c) Mine clearance inshore from the three-fathom line.

(d) Locating, improving, and marking usable channels.

(e) Delivery in usable form of data obtained during the prelanding operations, including such military information as is requested by or is important to the landing forces.

(f) Guiding leading waves to the landing beaches.

(3) Air Operations. The following air operations are conducted:

(a) Air defense measures are greatly intensified.

(b) Air attack measures include preplanned air strikes conducted against enemy defensive installations on, and in the vicinity of, the landing beaches and helicopter landing zones. In addition, strike aircraft are provided for attack against targets of opportunity. Immediately prior to H-hour, strike aircraft intensify neutralization attacks against defensive installations in the immediate vicinity of the landing beaches, helicopter approach and retirement lanes, and the helicopter landing zones. Schedule alterations are made to accommodate changes in H-hour. These neutralization attacks are continued until immediately prior to the landing of the leading waves, at which time the attacks are shifted from the beaches and landing zones to other selected targets in order to provide continuing support to the assault elements of the landing force.

(c) Air escort measures are conducted to neutralize or destroy enemy antiaircraft and other ground weapons endangering the helicopters and air transports.

(d) Miscellaneous air operations conducted during this period may include tactical air observation, reconnaissance, air spot for naval gunfire, artillery air spot, smoke missions, search and rescue, and electronic countermeasures.

(4) Naval Gunfire. The preparation of the landing area by naval gunfire is intensified as H-hour approaches. This fire is designed to destroy or neutralize hostile defense installations which might interfere with the approach and final deployment of the amphibious task force, and to assist in isolation of the landing area. Naval gunfire is used to support underwater demolition teams and minesweepers during their operations. Immediately prior to H-hour, major emphasis is placed on the destruction and neutralization of hostile defenses most dangerous to the successful landing of troops at the designated beaches or landing zones.

(a) Gunfire support ships are prepared to deliver fire on targets of opportunity. Immediate counterbattery fire is directed against hostile batteries when discovered. Gunfire is delivered against hostile reserves and armor as soon as such targets are revealed.

(b) Gunfire in close support of the ship-to-shore movement is continued on the immediate beach and landing zone defenses until the safety of the leading waves requires the fire to be lifted.

At this time, close support fire is concentrated on inland positions, on the flanks of the landing beaches or perimeters of the landing zones.

(5) Artillery. If artillery has been emplaced on islands or promontories during pre-assault operations, it delivers pre-arranged and target-of-opportunity fires.

(6) Coordination of Supporting Fires. Over-all coordination of air and naval gunfire support (and artillery fire, if previously emplaced) is the responsibility of the amphibious task force commander and is preplanned to the extent possible. The delivery of unscheduled fire support on targets of opportunity and unexpected changes in air operations necessitate continuous and close coordination of all fire support in order to ensure adherence to the principles described in Chapter 7.

1632 FINAL PREPARATIONS FOR THE SHIP-TO-SHORE MOVEMENT

a. As the amphibious task force starts the final approach to assigned positions for the assault, ships make preparation for the debarkation or enplanement of the embarked troops, equipment, and supplies in accordance with previously prepared plans. The commencement of debarkation or enplanement and the timing of the ship-to-shore movement are dependent on the designated H-hour. All elements must be prepared to modify plans on short notice to conform to changes in H-hour.

(1) Waterborne Movement. Personnel necessary for control of the ship-to-shore movement are transferred from transports to ships of the control group. Such transfers usually involve designated naval control officers and their parties, together with TacLog groups of the troop echelons. When these preparations have been completed, each control ship takes its station as shown in plans for the regulation and control of the ship-to-shore movement.

(2) Helicopter-borne Movement. Agencies to control the helicopter-borne movement take assigned stations and start operations as required to meet the planned time for landing the initial helicopter-borne units.

(3) Debarkation/Enplanement for Ship-to-Shore Movement. Debarkation and enplanement of assault elements of the landing force is accomplished on a strict time schedule for the ship-to-shore movement. Timing is based on the scheduled time of landing in relation to H-hour; the time necessary to debark or enplane the troops, their equipment, and supplies into landing craft, amphibian vehicles, or helicopters; and the calculated time enroute from the ship to the landing beach or landing zone.

For ships having on-call and non-scheduled troop units embarked, all preparations are made for debarking and enplaning them, and for dispatching these units when required.

1640 ASSAULT OPERATIONS

Assault operations by the landing force begin with the ship-to-shore movement and the landing of the first scheduled wave, and terminate with the capture of the final ground objectives of the landing force. Other forces continue to provide logistic and fire support during the assault operations of the landing force and continue to provide over-all protection of the amphibious task force.

1641 INITIATION OF THE ASSAULT

Prior to the arrival of the assault elements of the amphibious task force in the landing area, the decision is made to execute either the primary plan or one of the alternate plans for the assault. After arrival of assault shipping in the assigned sea areas, the amphibious task force commander initiates the landing by signal. H-hour is confirmed as soon as practicable, or is changed as necessary, by the amphibious task force commander following consultation with the landing force commander.

1642 SHIP-TO-SHORE MOVEMENT

a. The ship-to-shore movement is divided into two periods: the initial unloading period, which is primarily tactical in character, and must be instantly responsive to landing force requirements; and the general unloading period, which is primarily logistic and quantitative in character and emphasizes speed and volume of unloading.

(1) Sequence of Operations. The ship-to-shore movement may encompass any or all of the following operations:

(a) Assembly and formation of landing craft, landing ships, amphibian vehicle, and helicopters;

(b) Debarkation of troops and equipment from assault shipping into landing craft and amphibian vehicles, and enplanement of troops and equipment into helicopters;

(c) Transfer operations;

(d) Landing of assault, combat support, combat-service support and reserve troops, and their supplies, according to the requirement of the troop commanders;

(e) Rapid unloading of assault shipping.

(2) Tactical Integrity of the Troops. In the ship-to-shore movement, troop units must be landed so that control ashore by higher echelon may be quickly consolidated. Maintenance of troop tactical integ-

rity during the ship-to-shore movement is accomplished by proper combat loading of assault shipping and by proper assignment of troops to landing ships, landing craft, amphibian vehicles, and helicopters.

(3) Waterborne Movement. Scheduled waves are landed according to plan. Following the landing of the last scheduled wave, the landing of on-call waves and supplies in floating dumps is initiated as the situation requires, and continues until these categories are ashore. As the assault progresses, nonscheduled units and selected supplies (Landing Force Supplies) are landed in accordance with the requirements of the landing force. On occasion these categories may be required prior to the completion of the landing of on-call waves and supplies in floating dumps. Nonscheduled units and previously designated supplies are normally requested by serial until the inception of general unloading.

(a) Scheduled waves are predetermined as to time and place of landing. Their time of landing must be carefully coordinated with each other and with supporting fires. When practicable, the first scheduled wave is dispatched by the central control officer with other waves being regulated by the various primary control officers. If beaches are widely separated, decentralization of control is mandatory. When an amphibian vehicle wave reaches the limit of navigation of guide boats, responsibility for navigation passes to the wave (troop) commander.

(b) On-call waves contain units of the landing force for which an early need ashore is anticipated but whose time and place of landing cannot be accurately predicted. Reserve units of regimental landing teams are an example of this category. On-call waves are usually located in the vicinity of primary, assistant central control, or approach lane control ships in order to be available for landing with as little delay as possible. Since their use in this manner may represent an uneconomical or even hazardous employment of landing craft, ships or amphibian vehicles, the number of units placed in an on-call category is kept to a minimum consistent with the requirements of the landing force. Control of landing of on-call waves is a function of the cognizant control officer. When the commander ashore desires the landing of an on-call unit he notifies his TacLog group aboard the appropriate control vessel. The TacLog representatives inform the control office of the location of the unit and the desired place (and time if appropriate) of landing. The control officer then directs the landing of the unit.

(c) Floating dumps are established to provide emergency supplies, on an on-call basis and are pre-loaded in landing craft, landing ships, or amphibian vehicles. Floating dumps are located in proximity to the appropriate control officer who directs their landing as requested by the troop commander concerned.

(d) Landing force supplies, consisting of those supplies remaining in assault shipping after initial combat supplies and floating dumps have been unloaded, are landed selectively in accordance with the requirements of the landing force until the situation ashore permits the inception of general unloading.

(e) Nonscheduled units are units of the landing force held in readiness for landing during the initial unloading period, but are not included in either scheduled or on-call waves. This category usually includes certain of the combat support units and most of the combat service support units with higher echelon (division and above) reserve units of the landing force. Their landing is directed when the need ashore can be predicted with a reasonable degree of accuracy. The probable sequence of landing of nonscheduled units is determined during planning and is shown in the landing sequence table. Nonscheduled units are landed according to the requirements of the troop commander concerned. The responsibility for their landing is assigned by the amphibious task force commander to the commanders of the cognizant transport organizations. In the landing of nonscheduled units, the maximum coordination between troop and naval echelons is essential to ensure efficient use of landing ships and craft. The control officers concerned regulate the movement to the beaches of the ships and craft containing units and supplies, in accordance with instructions from appropriate transport organization commanders and requests from the Tac Log group. The following basic procedures apply whether the landing of nonscheduled units is centralized at the amphibious task force level or if landing of these units is decentralized.

1. Initiation of the Movement. As soon as the situation ashore permits, the landing force commander requests the amphibious task force commander to land the required nonscheduled units. In order to provide maximum support to the landing force, reduce the communication load, and facilitate the efficient use of landing craft, the request includes as many units as it is anticipated will be required ashore during a specified period. Unless a need for change is indicated, the list of units requested follows the sequence shown in the landing sequence

table. The initial list of units to be so landed is determined, to the extent that it is practicable to do so, during the planning phase, by mutual agreement between the landing force and amphibious task force commanders. In reaching this agreement, consideration is given to the anticipated situation ashore and the availability of landing craft at the time it is estimated the landing of the nonscheduled units will commence. Requests for change in the initial list of nonscheduled units to be landed are made by the landing force commander as soon as possible after the need for such change arises.

2. Continuation of the Movement. The landing force commander continually reviews the progress of the landing. Periodic and timely requests are submitted to the amphibious task force commander for landing such units and items of supply as are desired.

3. Change in Planned Sequence or Place of Landing. Since units and supplies must be placed on the beaches as required by the situation ashore it may be necessary to alter the planned sequence for landing. However, this may be done only at an overall sacrifice of speed. The landing force commander may specify changes in the sequence or place of landing of any unit. A combat loaded ship, however, is adaptable to only minor changes in the plan for unloading equipment and supplies. The landing of nonscheduled units may, by request of the landing force commander, be suspended entirely for a temporary period if required by the situation ashore. Likewise a shore party commander may request the appropriate control officer to stop the landing of units on his beach when conditions justify such temporary suspension. Units whose landing has been deferred upon request of the landing force are not landed until again specifically requested. In requesting such deferment the landing force takes note of the fact that such action may disrupt the planned use of lighterage. The size of a unit or the stowage of supplies in a ship, may be such that if not unloaded, the deferment will interfere with subsequent unloading. In such cases, the amphibious task force commander notifies the landing force commander.

(4) Helicopter-borne Movement. The helicopter-borne ship-to-shore movement normally is completed during the initial unloading period when tactical considerations are the dominant factor. It usually is necessary for the helicopters to make several trips between ships and landing zones to land and supply the helicopter-borne forces. The movement of

scheduled waves is conducted on a prescribed time schedule, and subsequent trips are made as rapidly as possible in accordance with the requirements of the landing force in order to ensure a rapid build-up ashore. After launching, helicopters proceed to the landing zone via the control points discussed in Article 1622. The senior troop unit commander enplaned, in conjunction with the senior helicopter unit commander enplaned, may make minor modifications in the plan for landing to accommodate variations in the tactical situation. For this purpose, alternate landing zones and sites are selected during the planning phase. After discharging their loads, helicopters take off individually, rendezvous by flights, and proceed to a specified break-up point. Each helicopter proceeds individually from the break-up point to the designated ship. Helicopters on their return trip may be utilized for casualty evacuation and will proceed from the landing zone to the designated ship.

(a) Landing categories for the helicopter ship-to-shore movement include:

1. Scheduled Helicopter Movements. This category consists of those assault elements of the landing force, together with their initial combat supplies, to be landed by helicopter for which times, places, and formations for landing have been determined. Landing of this category proceeds in accordance with the landing plan without change except in emergency. Scheduled landing usually begins at H-hour or other specified time, and continues until all elements in this category are landed.

2. Nonscheduled Helicopter Movements. The nonscheduled landing category consists of any remaining units of the landing force and their initial combat supplies, and any replenishment equipment or supplies which are to be helicopter lifted and which are not included in either the scheduled or on-call categories. The landing of this category commences upon completion of scheduled landings in accordance with landing force requirements. Once started it may be interrupted to permit on-call landings or landing of other selected units or supplies, or may be temporarily suspended because of unforeseen conditions, such as a requirement of the landing force to employ landing force helicopters for other tactical or logistical purposes. Modifications should be kept to a minimum since alterations will complicate the helicopter ship-to-shore movement.

3. On-call Helicopter Movements. This category consists of those helicopter-borne units with their initial combat supplies, or emergency supplies, whose need ashore at an

early hour is anticipated but whose time and place of landing cannot be accurately predicted. This category normally consists of those supporting elements, equipment, or especially selected supplies, whose need is anticipated for possible augmentation, replacement, or exploitation as the situation requires. Because of the urgency that may be attendant upon landing, elements or items in other landing categories may be interrupted to permit on-call landing. The number of on-call units or items must be kept to a minimum if their high priority status is to be preserved. On-call elements to be landed by helicopter are held in readiness aboard ship. These elements are listed in the helicopter employment and assault landing table. They are landed on call of the landing force commander.

(b) Once the helicopter-borne ship-to-shore movement is completed, transport helicopters continue tactical and logistical operations as directed by the landing force commander. Helicopter movement in these operations will be controlled by the air control system either ashore or afloat, or both. It may be expected that air control agencies will be functioning ashore during this phase of the operation.

(5) Protection. Protection comprising both active and passive measures must be provided during the ship-to-shore movement for all participants of the amphibious task force.

(a) Active protection includes of fensive air operations, combat air patrols, anti-submarine and anti-small-boat screens, covering forces, active electronic countermeasures, smoke, and counter-battery, antiaircraft, and antimechanized fire. Of particular importance is the effective protection acquired through speed of execution and aggressiveness in the conduct of the assault..

(b) Passive protection places major reliance upon dispersion within units, unit separation, and mobility. Dispersion and unit separation seek to minimize the effects of enemy fires while being consistent with the landing force scheme of maneuver. Mobility, in addition to providing the inherent protection of movement, enables any necessary concentration to occur at the latest time possible and to continue for the minimum time commensurate with the mission. Passive protection is achieved initially through unit separation afforded by the proper embarkation of troop units in ships of the task force. During the assault, passive protective measures are achieved by:

1. Dispersion within, and separation between, assault waves. Such spacing must be a compromise between the degree of passive protection considered essential and the concentration of combat power requisite to success.

2. Lateral separation of boat lanes, approach lanes, and helicopter approach and retirement lanes. Such spacing is maximized to obtain the greatest spread consistent with convergence required for concentration of combat power during the assault, and for the return of craft or helicopters to their parent ships.

3. Separation of individual beaches and landing zones. As in 1. and 2. above, such dispersal is predicated upon the enemy situation, terrain, available beaches, hydrographic restrictions, and means of control. In developing the scheme of maneuver ashore, effort is made to select helicopter landing zones which, consistent with tactical requirements, provide the necessary depth to the initial assault pattern.

4. Mobility of assault forces. Speed in movement denies the enemy accurate target information. In particular, the great mobility of helicopter-borne assault forces is exploited to obtain fluidity of movement both during the initial assault and during subsequent maneuver. Such mobility coupled with proper dispersal measures provides the essential passive protection required by the assault forces.

5. Dispersion of Assault Shipping. Only those elements of assault shipping whose presence is essential should be permitted in the landing area at any time. This is achieved by detailed planning, by speed and coordination in debarkation and by full exploitation of the sea echelon principle. See Chapters 11 and 14.

(c) Nuclear Weapons Defense. See Chapter 8.

(d) Electronic Countermeasures. See Chapter 9.

1643 SUPPORTING ARMS

a. The employment of supporting arms during the assault, emphasizes the close support of the landing force and includes the coordinated employment of air, naval gunfire and artillery support.

(1) Air Support. In air operations during the assault, emphasis is placed on close support of the assault troops, while execution of all other required air support operations continues. Offensive and defensive air operations begun prior to assault operations, are maintained, and preparation of the landing area continues. Aircraft not otherwise used are assigned specific targets or areas in which observed enemy are located. Strike groups range outward from the landing area to destroy enemy formations and installations.

(a) Close Air Support.

1. Until the tactical air control parties (TACPs) landed with the assault units are established ashore, close air support missions are executed under the direction of the air-borne tactical air coordinators. When the

tactical air control parties are established ashore, they request close air support from the tactical air control center (TACC) or the tactical air direction centers (TADC) afloat. The TACC (or TADCs) assign aircraft to missions as requests are received. As the landing progresses, air control elements of the landing force land and provide shore-based facilities for control of air operations.

2. As air support control agencies of the landing force are established ashore, they function initially under the TACC (or TADC) afloat. These agencies subsequently operate under the landing force commander when control of close air support has been passed ashore by the amphibious task force commander. In either case, requests are sent by the TACP directly to the air control agency, which assigns aircraft to close air support missions.

3. The terminal phase of close support air strikes are executed under the control of a forward air controller, a tactical air coordinator (airborne) or a landing force air support radar team. Close air support missions are executed only on the approval of the commander of the supported ground unit and commanders of units close enough to the target area to be affected.

(b) Air Defense.

1. Air defense measures are continued as necessary. Aircraft are shifted to meet changing requirements, and, except under conditions of heavy and prolonged enemy air attack, air defense does not exclude the assignment of fighter aircraft to other missions. As soon as conditions permit, the landing force air warning organization is established ashore in order to extend the air warning system of the amphibious task force.

2. Landing force antiaircraft units are landed and integrated into the air defense system. Air control agencies of the landing force are integrated into the over-all air defense control system and initially are directed operationally by the tactical air control center afloat.

(c) Miscellaneous Air Support Operations.

As soon as the minimum required facilities can be provided, observation and liaison type aircraft are deployed ashore to support the assault units. Prior to this deployment, observation missions may be performed by high performance aircraft from carriers or supporting bases. Smoke, reconnaissance and other tactical air missions are continued in support of the assault. Air transport support of the assault may be provided by land or sea based transport aircraft.

(d) Daily Planning. While control of air operations is retained by the amphibious task force commander, landing force air requirements for each day subsequent to D-day are consolidated by the landing force commander daily, and are presented to the amphibious task force commander, who inform the landing force commander of allocations for the following day. The amphibious task force commander determines the degree of emphasis to be placed on additional supporting operations, on the basis of the air operations order and changes in the situation. He makes a continuing evaluation of targets reported and damage assessed by pilots and ground observers, and on the basis of this evaluation the specific assignments are made. The landing force commander provides target intelligence and damage assessment information to the amphibious task force commander. He plans the establishment ashore of those land-based aviation units which are to participate in these and other air support operations.

(e) Control. The tactical air control center afloat initially controls all air operations. Responsibility for control of close air support and air defense is passed by the amphibious task force commander to the landing force commander ashore when the control agencies of the landing force are ready to operate, and in accordance with the plan and the dictates of the tactical situation. When responsibility for control of close air support, air defense, and miscellaneous air support operations is passed to the landing force commander ashore, he assumes the related responsibilities for the daily planning and execution of those air operations.

(2) Naval Gunfire. In naval gunfire operations in support of the assault, emphasis is placed on close support of the landing force while execution of all other required naval gunfire missions continues concurrently.

(a) D-day naval gunfire support, delivered just prior to the landing, is described in Article 1631a(4). Fires delivered during, and subsequent to, the landing fall into two categories:

1. Close Support Fires.

a. The final approach of the leading waves of assault landing craft, amphibian vehicles, or helicopters necessitates a shift of the scheduled fires inland from the water's edge or outward from the landing zones. The major portion of the fires delivered in close support of the landing consists of large and medium caliber fire and rocket fire delivered on a closely fixed schedule in the zones of action of the various troop units. The bulk of the rocket fire is delivered prior to

H-hour. After H-hour, rocket fire is shifted to the flanks to avoid delivery of overhead fire.

b. This schedule is based on an estimated rate of advance of assault units. Since the actual rate of advance and the estimated rate seldom coincide, the amphibious task force commander, through the supporting arms coordination center, retards or accelerates the movement of scheduled fires as requested by the landing force commander. Prearranged close support fires continue until the shore fire control party with each assault battalion landing team is in position to conduct the fires of the assigned direct support ships. At this time the shore fire control party assumes responsibility for the conduct of fire.

2. Deep Support Fires. Deep support fires usually are delivered by ships assigned in general support. Each such ship is assigned a zone of responsibility which it covers by fire and observation. Within assigned zones of responsibility, ships neutralize, on a prearranged schedule, known enemy targets, interdict enemy routes of communication, attack targets of opportunity, execute counterbattery fires, reinforce fires of direct support ships as directed, and conduct missions assigned by the supported unit.

(b) Post D-Day Naval Gunfire Support.

1. Subsequent to D-day, naval gunfire, in coordination with artillery and air, continues to support the attack until the completion of the operation.

2. Beginning on D-day, commanders concerned must start planning the naval gunfire required to continue support of the attack. Routine daily planning must continue throughout the remainder of the operation. The major aspects of these plans are discussed below:

a. Prearranged Fires. In planning prearranged fires subsequent to D-day, the landing force coordinates the plan of fires by selection and designation of targets, by timing as required, by recommending amount and type of ammunition to be used, and by designating landing force agencies to conduct the firing. Preparation, defensive, interdiction, harassing, and illumination fires may be prearranged.

b. Relief of Fire Support Ships and Spotting Aircraft.

(1) Fire support ships must be relieved at timely intervals to replenish ammunition and fuel. Destroyers may require relief daily, whereas larger ships remain on station for longer periods of time. Direct support ships should, whenever possible, relieve on station after a communications check and briefing by the supported unit and the ship being relieved.

(2) Relief of spotting aircraft organic to the fire support ships is accomplished incident to the relief of the parent ship. Relief of other spotting aircraft is effected through the tactical air control or direction centers and after the necessary coordination between the parent carrier or shore base, the amphibious task force, and the landing force.

c. Consolidated Daily Naval Gunfire Request. Landing force requests for fire support ships, shore fire control frequencies, spotting aircraft, and special missions are originated at all landing force echelons beginning with the battalion or equivalent unit. These requests are screened, reconciled, and consolidated at each echelon through which the requests pass. At the landing force level, after final screening and coordination, the requests are collated and constitute the consolidated daily naval gunfire request. This consolidated request is submitted, at a prescribed time, to the amphibious task force commander. On the basis of this consolidated request and the availability of fire support means, daily assignments best suited to meet the landing force requirements are made by the amphibious task force commander.

d. Control. When the over-all situation and the facilities of the landing force ashore permit, the amphibious task force commander may pass control of naval gunfire support to the landing force commander. (See Chapter 7).

(3) Coordination of Fire Support

(a) From the beginning of the assault until a short time after the first waves land, coordination of the fire support is achieved mainly by the execution of the prearranged fires scheduled during the planning phase. As the control agencies of the landing force become operational ashore, all practicable close support call fires from all supporting arms are provided as requested by troop units. Coordination is accomplished at the lowest echelon possessing necessary control facilities and having authority over the elements affected by the mission.

(b) This same principle applies in the planning of prearranged fires. Coordination of planning is accomplished as required at each level of the landing force before daily fire support plans are transmitted to the next higher level for similar action. By this process, all fire support requests for the landing force are coordinated.

1. Responsibility for Coordination. Initially the amphibious task force commander has responsibility for the over-all coordination of supporting

fires. Coordination of landing force requests for supporting fires, however, remains a landing force function. As command and control agencies of the landing force are established ashore responsibility for discharge of appropriate fire support coordination functions is passed ashore. When the landing force commander is ashore, has established the necessary facilities, and conditions permit, the responsibility for over-all coordination is transferred to him by the amphibious task force commander.

2. Coordination Agencies. Coordinating agencies are the supporting arms coordination center (amphibious task force) and the fire support coordination center (landing force). These centers are not vested with command functions, but are staff agencies serving those force commanders. The detailed operations of the supporting arms coordination center and fire support coordination center are covered in naval and landing force publications as appropriate.

a. Supporting Arms Coordination Center.

(1) The supporting arms coordination center (SACC) is the agency through which the amphibious task force commander (and attack group commander or advance force commander when appropriate) exercises over-all coordination of the supporting fires which he controls. The SACC operates in the flagship of the Navy commander concerned. The supporting arms coordinator is in charge of the center and is the direct representative of the Navy commander who is charged with supporting fires coordination at the time. The supporting arms coordinator, with the advice of the landing force fire support coordinator, integrates the fire plans of the supporting arms to ensure their most effective use in furthering the landing force scheme of maneuver. Plans must be so integrated as to avoid duplication of effort. Further, they must specify restrictive measures as necessary and must provide for an up-to-date target file.

(2) When responsibility for the coordination of supporting fires is passed to the landing force commander ashore, the supporting arms coordination center continues to monitor appropriate supporting arms circuits.

b. Fire Support Coordination Center.

(1) The fire support coordination center (FSCC) is the agency through which the landing force commander (or landing group commander when appropriate) plans for the integration of the fires of supporting arms to support the scheme of maneuver. The fire support coordinator is in charge of the center, and as such is the direct representative of the commander

under whom the center is functioning. While afloat the fire support coordinator receives requests from subordinate landing force echelons. He coordinates these requests and advises the supporting arms coordinator of landing force requirements for fire support, and the manner in which this support can be employed most effectively. He also keeps the supporting arms coordinator advised of the activities of artillery ashore.

(2) While afloat the fire support coordination center and the supporting arms coordination center function in close cooperation. Personnel of the two centers who have similar duties are stationed in the same or contiguous spaces.

(3) Some personnel of the fire support coordination center normally accompany the advance force to advise the commander of that force on the attack of targets which present a potential threat to the landing force. These personnel normally transfer to the flagship of the amphibious task force or attack group upon dissolution of the advance force.

(4) On order of the landing force commander, the fire support coordination center displaces ashore, leaving in the supporting arms coordination center aboard ship sufficient personnel to provide continuity of coordination until the fire support coordination center is established and functioning ashore. When the amphibious task force commander assigns the over-all responsibility for coordination of fire support to the landing force commander, the fire support coordination center then is responsible for coordinating the fires of all the supporting arms.

(5) At this time the supporting arms coordination center assumes a standby and monitoring status.

c. Agencies of Attack and Landing Groups.

When attack groups and landing groups are formed, their respective supporting arms coordination and fire support coordination centers are employed in a manner similar to the same agencies of the amphibious task force and the landing force.

d. Concurrent Shift of Responsibility for Control and Coordination of Supporting Arms. In order to obtain the most effective coordination of supporting fires, it is highly desirable that the commander responsible for coordination also exercise control of those fires. When control of close air support is passed from the amphibious task force com-

mander to the landing force commander ashore, the situation normally permits a concurrent shift in responsibility for control of naval gunfire and for the overall coordination of all supporting fires. If, after such a shift of responsibility, it becomes necessary to return one or another of the control functions afloat, the difficulties in the separation of responsibility for supporting arms may be accepted on a temporary basis. The principle of concurrent shift of responsibility for control and coordination of supporting fires is similarly applicable to attack groups and landing groups.

e. Nuclear Fires.

(1) The employment of nuclear fires parallels closely the employment of other supporting fires. As in the case of other supporting fires, nuclear fires may be preplanned or on-call. The magnitude of nuclear weapons effects increases the importance and extent of coordination measures. Nevertheless this condition must not be allowed to reduce the benefits which accrue. The lowest echelon having the capability to acquire targets and to effect the requisite control and coordination is delegated the means and authority to employ nuclear weapons. Initially this authority will be retained by the amphibious task force commander. Consistent with the policy of higher authority this is later delegated to the landing force commander and, as necessary, to subordinate echelons of the landing force.

(2) The effectiveness of nuclear weapons must be measured to a large degree by the speed with which targets are identified, analyzed, and attacked. Procedures designed to reduce to a minimum the time between discovery of an appropriate target and the nuclear attack are standardized. These procedures may include having a number of nuclear weapons prepared and ready for delivery.

(3) When a nuclear weapon is used in close support of troop operations ashore, rapid exploitation may be more important than the primary effects gained from the explosion itself. When a troop commander desires that a nuclear weapon be used in support of his operations, he so recommends to the commander having authority to employ the weapon. He includes in his recommendation the desired type and size of the weapon, desired ground zero, the desired height of burst, the method and time of delivery, and the location and description of the target. He also provides information as to the planned troop maneuvers, if any, to be integrated with the delivery of the weapon.

(4) When nuclear fires are to be employed, the commander who has authority to employ the

weapon issues the necessary orders to the delivery agency and informs all forces who may be endangered or affected. If troop maneuvers are to be coordinated with the burst, careful arrangement of details with the related troop commander is required.

1650 CAPTURE OF THE BEACHHEAD

a. Operations are directed toward the establishment of a secure beachhead of sufficient extent to ensure the continuous landing of troops and material and to provide the terrain features and maneuver space required for initiating planned further operations ashore. During operations to capture the beachhead intermediate objectives are designated to enable troop commanders to coordinate their efforts. An early juncture between the water-borne forces and troops landed by helicopter, parachute, or transport aircraft is desirable. Reserves of the assault units are landed as required in order to maintain the momentum of the attack.

b. Higher echelon reserve units and combat support and combat service support units are landed as the situation ashore permits, and as required to support the seizure of the beachhead and the continuation of the attack.

1651 COMBAT SUPPORT UNITS

a. The employment of combat units in the assault varies with the scheme of maneuver of the landing force.

b. The landing of such units is planned to provide flexibility in order that they may be used at the time and place best suited for full exploitation of their capabilities. Certain combat support units, such as tanks and engineers, may land in the scheduled waves. Under such circumstances the initial employment of these units is pre-planned. Other combat support units for which an early requirement is anticipated may be placed in the on-call waves.

c. Combat service support units required to support helicopter-borne assault forces may be held in schedules, on-call or nonscheduled categories. However, the landing of such units is provided for in the Helicopter Employment and Assault Landing Table. Equipment and supplies required to support helicopter-borne units, and not carried with those units, are landed as requested by the helicopter support team concerned, through the cognizant TacLog group and naval control agency. Remaining combat support

units are placed in a nonscheduled status. Their degree of readiness for landing is governed by tentative plans for their use.

1652 LANDING OF RESERVES

Landing of the reserve of assault BLTs (or similar formations) is usually scheduled. Reserves of higher echelons, including the landing force reserve, are maintained in immediate readiness for landing as required.

1660 CONTINUATION OF THE ATTACK

The attack is continued by coordinated operations conducted by the landing force for the capture of the final objective. Continued attack is conducted after the beachhead is captured (unless the final ground objective is within the beachhead) and depends on the completion of a satisfactory buildup ashore of combat support, combat service support, and reserve units. Tactical reorganization and reorientation for the attack are accomplished as necessary before the coordinated attack from the beachhead is launched.

1670 LOGISTICS

a. During the assault phase, the logistic support system of the landing force is developed progressively ashore, starting from a ship-based status, proceeding through a period of decentralized support conducted through several beaches and landing zones, and eventually consolidated into a single centrally controlled effort. Since the supplies and equipment carried by individuals and organizations in the initial landing are limited, a flexible yet positive system is established to provide timely replenishment of supplies and to build up stocks ashore to sustain the assault and diminish the dependence of the landing force on supplies which are still afloat. The system includes:

(1) Emergency Resupply. When a need for supplies cannot be met from supplies already landed, the appropriate TacLog group notifies the related naval control officer of the ship, craft or vehicles in which the desired supplies are loaded.

(a) Waterborne means. The control officer dispatches the needed supplies by the appropriate boat, barge, or vehicle to the proper beach. After unloading the vehicle, barge or craft replenishes its load as directed.

(b) Helicopter-borne Means. Emergency supplies (on-call and nonscheduled categories) are dispatched to landing zones ashore by the HDC, whereupon helicopters are released for further tactical or logistical missions as directed.

(2) Logistic Support Areas. During the initial stages of the assault, logistic support is provided from within beach support areas and landing zones. As the operation progresses, the functions carried out from these areas are consolidated, and logistic support areas are established. These logistic support areas contain balanced stocks of supplies and minimum necessary maintenance facilities. Operations of these support areas, and their defense, normally is coordinated by the senior troop unit commander ashore. Landing force units are supported directly from these logistic support areas, and intermediate echelons in the chain of logistic support are eliminated. Supplies held in these logistic support areas are retained insofar as possible, in their packaged condition and are not broken down until delivered to the requesting unit.

(3) Air Delivery. Aircraft may deliver limited amounts of supplies from ships or nearby bases to appropriate units either by air landing, seaplane, or air drop.

(4) Other Logistic Support Functions. In addition to supply, some of the principal logistic support functions, such as evacuation, medical service, and salvage, are initially performed to a very limited extent by the shore party or helicopter support team. These functions are eventually consolidated ashore under designated combat service support agencies of the landing force.

(5) Shore Party and Other Combat Service Support Units. The shore party is progressively established ashore by consolidating decentralized functions under centralized control. As the landing progresses, combat support elements are established ashore, logistic support areas are organized and the shore party is relieved of certain combat service support functions. Helicopter support teams, however, continue to provide limited close logistic support to the helicopter-borne units to which attached. If base and garrison forces are introduced into the area, the shore party may be progressively relieved of beach operations by such forces.

(a) The movement of shore party and helicopter support elements from ships to landing beaches or landing zones in support of combat units is a continuous evolution. Only a small segment of the shore party is landed in scheduled waves. The major part of the shore party organization is included in the nonscheduled category and is landed at a time best suited to tactical developments ashore. Helicopter support teams, however, being smaller and more specifically associated with the early assault operations, are landed in scheduled waves.

(b) Other combat service support units may be attached to the shore party or helicopter support teams to facilitate their early establishment ashore. Remaining combat service support units are landed as required, to provide continuous logistic support as the operation progresses. As the shore party ashore is built up to full strength combat service support units may be released progressively to their parent organization. These organizations expand the logistic support facilities initially established.

(6) Evacuation of Casualties.

(a) Before the establishment ashore of major medical facilities of the landing force, all casualties ashore are evacuated directly to the evacuation stations initially located on the beaches and landing zones. The medical detachments at each evacuation station prepare casualties for further evacuation by helicopter, landing craft, or amphibian vehicle to designated ships. These medical detachments also assist the evacuation station personnel in loading and directing the flow of casualties into helicopters, landing craft, or amphibian vehicles for further evacuation seaward.

(b) Landing craft or amphibian vehicles evacuating wounded report to a casualty evacuation control officer for instruction as to further disposition of casualties. The casualty evacuation control officers are initially embarked in control ships. When the situation permits, they transfer to specially designated evacuation control ships located off the landing beaches. Helicopters evacuating personnel proceed to ships designated in initial plans, or as altered during the assault by instructions from the helicopter control organization.

1. Facilities Ashore. When the major medical facilities of the landing force are landed and established ashore, casualties flow through them and are treated and processed in accordance with the prescribed evacuation policy, or in specific instances casualties may be evacuated directly to designated areas or ships.

2. Casualty Carrying Ships. As the hospital capacity of the casualty carrying ships is reached, and when the tactical situation afloat permits, such ships are ordered to depart for designated advanced bases where casualties are transferred to hospitals ashore. Before they depart from the objective area casualty carrying ships return to shore all personnel fit for duty. They also transfer minor casualty cases to ships remaining in the area, in exchange for serious cases.

3. Hospital Ships enter the objective area as soon as the tactical situation permits. As landing fields and seaplane landing areas become available, air evacuation (in addition to that by

helicopter) is begun. Evacuation by aircraft and to hospital ships is the responsibility of the senior troop commander ashore, and is conducted in accordance with the evacuation policy announced for the operation. The amphibious task force commander keeps the landing force commander informed of the naval means available for evacuation.

(7) Evacuation of Prisoners of War. Prisoners initially are processed through the shore party or helicopter support team. Some may be evacuated to designated ships by landing craft, helicopters or amphibian vehicles. Later, stockades are established ashore and prisoners are handled in the manner normal to land warfare.

(8) Shipment of Captured Material. Enemy material of new design or of immediate intelligence value to higher authority may, after thorough processing through landing force and interested amphibious task force elements, be shipped to designated rear areas.

(9) Initiation and Control of General Unloading. General unloading encompasses the unloading of units and cargo from the ships as rapidly as facilities on the beach permit. It proceeds without regard to class, type, or priority of cargo, as permitted by cargo handling facilities ashore. However, the initiation of general unloading does not preclude the landing of nonscheduled units in accordance with the landing sequence table, or the unloading of designated supplies if an emergency arises ashore.

(a) Considerations. General unloading is initiated on order of the amphibious task force commander, on the recommendation of the landing force commander. The recommendation of the landing force commander will be influenced by existence of the following conditions:

1. When the progress of the attack, and the over-all situation ashore permit discontinuance of the strictly controlled movement of selected units and supplies, and ensure reasonable security for logistic installations ashore.

2. When sufficient quantities of all classes of supplies have been landed, segregated, and stocked ashore to supply the landing force for a period of time specified by the landing force commander.

3. When logistic support areas are adequate to permit further landing and unloading of supplies.

(b) Execution. When the amphibious task force commander is satisfied that conditions are favorable from both the landing force and naval viewpoints, he gives the order to commence general unloading. When the order is given, the control organization for the initial unloading period of the ship-to-shore movement ceases to operate except for regulation of traffic,

but remains substantially intact in a standby status, ready to resume selective unloading if required.

1671 FOLLOW-UP SHIPPING

a. Shipping assigned to the amphibious task force is called assault shipping. Shipping used to resupply the amphibious task force or to transport the units, supplies, and equipment required for the buildup of the beachhead is called follow-up shipping. This shipping is provided by an area or fleet commander, and is echeloned into the objective area as requested by the amphibious task force commander.

(1) Responsibilities of The Area or Fleet Commander. The area or fleet commander provides the ships to be included in the follow-up echelons, and ensures that they are loaded in accordance with the requirements of the amphibious task force. He directs the movement of follow-up shipping to and from the objective area or regulating point, and provides protection during such movement. Follow-up shipping is moved to the objective area or regulating point in accordance with the schedule desired by the amphibious task force commander.

(2) Responsibilities of the Amphibious Task Force Commander. The amphibious task force commander directs the movement of follow-up shipping from a regulating point to and within the objective area. Upon unloading, empty ships of the follow-up echelons are returned to a regulating point or to a location where an area or fleet commander assumes responsibility for them. The amphibious task force commander provides protection for follow-up echelons while they are in his charge. He controls all assault and follow-up shipping at the regulating points and in the objective area, as well as shipping moving from one of those areas to the other. He orders shipping forward, as necessary, to fulfill the needs of the landing force for units, materials, and supplies. He recommends the date on which control of follow-up shipping reverts to the theater or area logistic system and normal shipping control agencies.

(3) Responsibilities of the Landing Force Commander. The landing force commander informs the amphibious task force commander of his requirements for units, materials, and supplies during the latter stages of the assault, and specifies the time at which they will be required. The landing force commander is responsible for the movement of cargo of the follow-up shipping into the logistic support areas after receipt from afloat.

1680 COMMUNICATIONS

a. Chapter 9 gives details of communications planning. The following paragraphs give additional information pertinent to the assault phase.

(1) External Communications. At the objective area, all communications with forces external to the amphibious task force are provided initially by the amphibious task force commander. As soon as practicable, installation of facilities ashore is completed by the landing force commander, who assumes responsibility for external communications for units ashore. Normally, mobile communications units are attached to the landing force to provide for long-range external communications. These units are reassigned if more permanent facilities are provided as part of an advanced base installation.

(2) Lifting of Radio Silence. Radio silence is usually lifted just prior to H-hour on order of the task force commander. This is desirable in order to test all circuits before the assault begins.

(3) Shipboard Radio Facilities for Troop Use. Radio equipment required for troop use in operating landing force radio nets while still afloat is provided from facilities installed in amphibious shipping. The use of such equipment allows landing force units to have their complete allowance of equipment available for the movement ashore.

1690 INITIATION OF OTHER TASKS DURING THE ASSAULT PHASE

During the assault, it may be desirable to initiate, as conditions permit, certain tasks such as base development, area defense, and the buildup of forces and supplies for further operations following the amphibious operation. Such tasks are normally undertaken by units which, while initially attached to the amphibious task force for this purpose, are designated to remain in the objective area following termination of the amphibious operation.

1691 TERMINATION OF THE ASSAULT PHASE

Termination of the assault phase coincidentally marks the termination of the amphibious operation in accordance with the principles set forth in Article 113. Dissolution of the amphibious task force, reassignment of forces, and transfer of responsibility for further operations in the objective area are accomplished as prescribed in the referenced article.



PART IV

LESSER INCLUDED OPERATIONS

Chapter

- 17 Amphibious Withdrawals**
- 18 Amphibious Demonstrations**
- 19 Amphibious Raids**



CHAPTER 17

AMPHIBIOUS WITHDRAWALS

CONTENTS

1700 DEFINITION

1710 PURPOSE

1720 SCOPE

1730 ORGANIZATION AND COMMAND RELATIONSHIPS

1740 CHARACTERISTICS

1750 EXECUTION

1760 SUPPORTING ARMS

1770 EMBARKATION PROCEDURES

AMPHIBIOUS WITHDRAWALS

1700 DEFINITION

An amphibious withdrawal is a withdrawal of forces by sea in naval ships or craft from a hostile shore.

1710 PURPOSE

The purpose of the amphibious withdrawal is to redeploy forces for employment elsewhere.

1720 SCOPE

The amphibious withdrawal operation extends from initial measures in defense of the embarkation area, in conformity with the requirements imposed by the enemy situation, to the embarkation of the final elements of the force being withdrawn.

1730 ORGANIZATION AND COMMAND RELATIONSHIPS

The organization of forces, the responsibilities for accomplishment of tasks, and the command relationships during an amphibious withdrawal are essentially the same as those obtaining in the objective area during the assault phase of an amphibious operation. Such variations in responsibility and command authority as are required by the individual situation must be announced in the directive to undertake the operation.

1740 CHARACTERISTICS

a. While sharing the basic maritime features of the amphibious assault, in that it depends upon the sea for support and transportation, the amphibious withdrawal embraces the following distinguishing characteristics:

(1) Except in the case of withdrawal associated with amphibious raids, planning processes will usually be abridged.

(2) Where enemy action against the landing force is substantial or when the requirement for the forces elsewhere is great, the time available for execution of the withdrawal will be brief.

(3) Facilities for embarkation and loading may be extremely restricted, with consequent intensification of logistic problems.

(4) Where the withdrawal is conducted in the face of strong enemy action, the requirements for security are of paramount importance.

(5) All of the requisite fire support means may not be available.

(6) Means for controlling the withdrawal may be limited.

(7) The operation may, of necessity, be conducted under adverse conditions of weather, terrain and hydrography.

(8) Circumstances may render it advisable to conduct the operation under conditions of limited visibility.

1750 EXECUTION

a. Without respect to its specific purpose, the amphibious withdrawal will be executed in accordance with the following general sequence of steps:

(1) Defense, as required by the enemy situation, by air, naval and ground covering forces accompanied by the embarkation of personnel, supplies and equipment which are not required for support of operations ashore.

(2) Progressive reduction of troop and material strength ashore under the protection of naval and ground covering forces. Depending on limitation of afloat cargo capacity and/or loading time, all usable military material is either evacuated or destroyed.

(3) Withdrawal of the ground covering force, with priority to heavy elements such as artillery and tanks, usually under cover of darkness, and supported as necessary, by air and naval fire support means.

1760 SUPPORTING ARMS

The defense of an embarkation area on a hostile shore requires the same close coordinate employment of all arms -- artillery, naval gunfire and air -- as that required for an assault landing. (See Chapters 7 and 16). The procedure used in this coordination is essentially the same in both cases. The primary difference is that, in the assault, supporting arms and control facilities are progressively built up ashore, whereas, in a withdrawal from a hostile shore, the arms and control facilities are progressively decreased ashore until eventually all their functions are performed by units afloat or airborne. Isolation of the beach, if requisite supporting arms are available, may be more readily

achieved than during the assault, since enemy troop and weapon dispositions cannot be pre-planned or emplaced due to the transitory nature of the operation.

1770 EMBARKATION PROCEDURES

a. Planning for embarkation of forces, incident to an amphibious withdrawal, is conducted in accordance with the normal planning procedures as set forth in Chapter 12 if the embarkation is preparatory to the employment of the force in an amphibious operation. In case the embarkation is incident to a decision to terminate operations on shore and to redeploy troops to a designated base or base areas, the planning procedures are abridged as necessary to conform to time requirements.

b. Combat loading will be employed in embarkation in preparation for an amphibious operation. Embarkation for movement to base areas will normally employ administrative loading.

c. The initial size of the embarkation area depends upon several factors, such as:

(1) Terrain essential for defense in the event the embarkation is accomplished under enemy pressure.

(2) Number of personnel and amount of equipment and supplies to be embarked.

(3) Artillery, naval gunfire and air support available for defense if required.

(4) Nature and extent of embarkation beaches.

(5) Time available for the embarkation.

CHAPTER 18

AMPHIBIOUS DEMONSTRATIONS

CONTENTS

1800 DEFINITION AND PURPOSES

1810 DEMONSTRATIONS WITHIN THE OBJECTIVE AREA

1820 DEMONSTRATIONS OUTSIDE THE OBJECTIVE AREA

1830 PLANNING CONSIDERATIONS

1840 EXECUTION

AMPHIBIOUS DEMONSTRATIONS

1800 DEFINITION AND PURPOSES

a. An amphibious demonstration is an operation conducted for the purpose of deceiving the enemy by a show of force with the expectation of deluding the enemy into a course of action unfavorable to him. The demonstration is a feint at landing involving an approach to a beach or landing zone.

b. It is intended to confuse the defender as to the time, place or strength of the main attack, and normally includes preparatory and supporting fires.

1810 DEMONSTRATIONS WITHIN THE OBJECTIVE AREA

An amphibious demonstration may be conducted within the objective area by a portion of the amphibious task force when it is intended to influence enemy action within that area. It may be intended to cause the enemy to employ his reserves improperly, to disclose weapon positions by inducing him to fire prematurely, to distract his attention, to place an early burden on his communications system, to precipitate a general air or naval engagement, or to harass him. The decision to conduct such a demonstration is made during planning by the amphibious task force commander, following consultation with the landing force commander.

1820 DEMONSTRATIONS OUTSIDE THE OBJECTIVE AREA

An amphibious demonstration may be conducted outside the objective area to divert or immobilize enemy strategic reserves or other forces capable of affecting the amphibious operation, to distract hostile attention from such an operation, or to precipitate a general air or naval engagement. Such a demonstration may be executed by a separate amphibious task force. The time and place of the demonstration is decided by higher authority, on the basis of the recommendations of the commander of the amphibious task force whose operations it is to support.

1830 PLANNING CONSIDERATIONS

a. In planning amphibious demonstrations within the objective area, consideration must be given to the following:

(1) Location. The demonstration area must be near enough to the main landing area to permit subsequent employment of the demonstration force in accordance with the tactical plan. On the other hand, it should be sufficiently separated from the main landing area to avoid interference with the main landing, and to ensure that the enemy will be materially delayed in correcting any improper disposition of his forces. The demonstration area must be suitable for an actual landing, for only in such an area can the threat of landing be plausible. The demonstration area should also be important to the enemy, since only a threat to an area of value will induce the enemy to react. An alternate landing area will often prove suitable for demonstration purposes. If the demonstration is intended solely to cause the enemy to disclose his positions by opening fire prematurely, or to harass him, it may be conducted in the main landing area prior to D-day.

(2) Timing. The time of a demonstration conducted in support of a main landing is based on the time of the supported landing.

(a) Prior to Main Landing. A demonstration may be conducted prior to the main landing if the purpose is:

1. To draw enemy forces to the threatened area and away from the area of the main landing.
2. To cause the enemy to disclose his positions.
3. To provide protracted and systematic harassment.
4. To divert the attention of the enemy from the main landing.
5. To cause a premature commitment of enemy forces.

(b) Simultaneously with Main Landing. A demonstration may commence at the same time as the main landing if it is desired:

1. To prevent redeployment of enemy forces.
2. To deceive the enemy as to the location of the main attack.

(c) Subsequent to Main Landing. A demonstration may be conducted subsequent to the main landing if the desired effect is to divert enemy forces or fire from the point of the initial landing. Successive demonstrations may be executed at a number of points after the main landing.

(3) Forces. The demonstration force must be of such composition and size as to cause the desired reaction. When the demonstration force is constituted from within the amphibious task force, the landing force reserve and the shipping in which it is embarked may be employed if the presence of the reserve is not required in the immediate area of the main landing. On completion of the demonstration, the demonstration force is dissolved, and its elements are reassigned in accordance with the operation order or plan.

(4) Supporting Arms. The demonstration force should execute supporting fires of a nature and scope which ensures credibility. Factors which may serve to limit the availability of supporting fires are availability of fire support ships, aircraft and ammunition supply.

(5) Rehearsals. Sufficient rehearsals are held to ensure that the demonstration will be realistic.

1840 EXECUTION

a. The effectiveness of a demonstration increases in direct proportion to the degree of realism involved in its execution. It should be neither underplayed nor overplayed, since to do either may destroy the

effect sought. It is important that the enemy receive a convincing impression of preparations for a landing. All visible, audible and electronic aspects of the demonstration must appear to be authentic. A demonstration normally includes the approach of the demonstration forces to the demonstration area, at least a part of the ship-to-shore movement and the employment of supporting fires. A brief but intense preliminary bombardment will usually be more effective than deliberate harassing fire over longer periods of time. A communications deception plan should be used. Underwater demolition teams and tactical deception units may be employed.

b. The demonstration must be prolonged a sufficient period of time to allow the enemy to react to it. The movement of waves toward the beach or landing zones is conducted as a normal ship-to-shore movement, except that boat waves do not actually beach and helicopter waves do not land. Empty landing craft maintain sufficient distance from the beach so as to preclude close enemy observation. At a prearranged time or distance from the beach, or landing zone, or upon signal, the boat waves and/or helicopter waves withdraw. Smoke may be used to conceal the withdrawal.

CHAPTER 19

AMPHIBIOUS RAIDS

CONTENTS

1900 DEFINITION

1910 PURPOSE

1920 ORGANIZATION AND COMMAND RELATIONSHIPS

1930 PLANNING CONSIDERATIONS

1940 REHEARSALS

AMPHIBIOUS RAIDS

1900 DEFINITION

An amphibious raid is a landing from the sea on a hostile shore involving swift incursion into or temporary occupancy of an objective followed by a planned withdrawal.

1910 PURPOSE

Amphibious raids are conducted for such purposes as inflicting loss or damage, securing information, creating a diversion and capturing or evacuating individuals and materiel.

1920 ORGANIZATION AND COMMAND RELATIONSHIPS

The principles of organization and of command relationships, stated in Chapter 2, are applicable for amphibious raids. However, the wide variation in the purpose of raiding operations and the consequent variation in composition of the raiding force and associated naval forces, requires a full description of the precise command arrangements which apply in each case.

1930 PLANNING CONSIDERATIONS

a. General. An amphibious raid is planned and executed in the same general manner as a landing for the purpose of capturing a position ashore, except that specific provision is invariably made for withdrawal. Because of its lesser size and limited purpose, the plans for a raid may embody the following variations:

(1) It may be unnecessary for the selected beaches or landing zones to meet all the requirements of an amphibious assault. In small scale raids they are chosen from the point of view of insuring tactical surprise.

(2) The limited duration of a raid may make it possible to conduct the operation without local naval and air superiority.

(3) Final deployment of the raiding force may not be required until it reaches the objective ashore.

(4) The limited objective and short duration of the amphibious raid will usually simplify logistic support requirements.

(5) Through prearrangement, it may be possible for a small-scale raid to be executed with very limited communications means.

b. Detailed Planning Considerations. The following considerations are of basic importance in planning a raid.

(1) Surprise is an essential ingredient in the success of an amphibious raid and offsets, in large measure, the lack of logistic and fire support normally associated with amphibious operations.

(2) Security during the planning and execution of a raid must receive particular attention, to include full exploitation of deceptive measures. Such deceptive measures may take the form of elaborate cover plans, or may be confined to simple ruses.

(3) The following factors will influence the choice of landing areas for the raiding force.

(a) Enemy dispositions.

(b) Sea approaches.

(c) Hydrographic and beach characteristics.

(d) Availability of helicopter landing zones.

(e) Avenues of approach to the objective of the raiding force.

(4) The time which it is estimated the raiding force will have to be ashore may influence the choice of H-hour and, consequently, the conditions of visibility under which the raiding force may be landed. It will likewise affect the scope of logistic arrangements which must be made.

(5) The purpose of the raid, including its relation to other concurrent or imminent operations which it may support, will influence the selection of D-day for the raid. In addition, these same factors may affect the availability of shipping, aircraft, logistic and/or fire support means for the raid.

(6) The planning for the embarkation of forces assigned to participate in an amphibious raid is similar to that required in preparation for the amphibious assault, subject to the necessary increase in security measures required. See Chapter 12.

(7) Fire support planning is similar to that for an amphibious assault, except that, where surprise is a major factor, supporting fires usually are withheld, and radio silence maintained until surprise is lost.

(8) Planning for the ship-to-shore movement is generally similar to that for an amphibious assault, except that the movement may, in some instances, be made entirely by helicopter.

(9) The withdrawal must be planned in detail, to include alternate provision, as to both time and place, for reembarkation. If the landing point and withdrawal point are not the same, positive means of

location and identification of the latter must be established. Special situations may permit planning for the withdrawal of the raiding force directly into friendly territory without reembarkation. Withdrawal by air may be possible when the area of the raid includes a usable airfield, terrain suitable for landing helicopters, or water suitable for landing seaplanes.

1940 REHEARSALS

Thorough, integrated rehearsal is requisite to precision and speed in execution of a raid. All par-

ticipating forces must be drilled in every detail of debarkation, movement ashore, operations ashore, withdrawal and reembarkation. Rehearsals assume even greater importance in preparation for amphib-

ious raids than for other lesser included types of amphibious operation. Timing, so vitally important in all amphibious raids, cannot be accurately estimated or adhered to without adequate rehearsals of the entire raiding force. The provisions of Chapter 13 are generally applicable.

OPERATIONS UNDER UNUSUAL CONDITIONS

Chapter

- 20 Landings in Low Visibility**
- 21 Cold Weather Operations**



CHAPTER 20

LANDINGS IN LOW VISIBILITY

CONTENTS

2000 DEFINITION AND PURPOSE

2010 PLANNING

2020 OPERATIONAL CONSIDERATIONS

2030 REHEARSALS FOR LANDINGS IN REDUCED VISIBILITY

CHAPTER 20

LANDINGS IN LOW VISIBILITY

2000 DEFINITION AND PURPOSE

a. A landing in reduced visibility is defined as one in which the ship-to-shore movement is executed, and at least the initial objectives captured, under cover of darkness, or under limited light conditions imposed by fog, rain, snow, or smoke.

b. Landings under these conditions, when undertaken deliberately, are for the following purposes:

- (1) Achievement of tactical surprise.
- (2) Elimination or reduction of the effectiveness of particular enemy dispositions which cannot otherwise be accomplished.
- (3) Achievement of secrecy in landing reconnaissance or raiding units.

c. In addition, external circumstances such as the changing enemy threat to the amphibious task force, last minute alterations and weather conditions may impose a landing under reduced visibility conditions.

2010 PLANNING

Planning for an amphibious operation under conditions of reduced visibility is similar to that for other amphibious operations. Plans must provide, however, the greatest possible detail on the landing beaches and helicopter landing zones and the approaches thereto, terrain, enemy dispositions and obstacles to movement. The plan of attack must be of maximum simplicity and provide for the seizure of limited ground objectives and approaches thereto which are easily recognized.

2020 OPERATIONAL CONSIDERATIONS

a. The following factors must be considered when undertaking an amphibious operation under conditions of reduced visibility:

(1) Weather and Hydrography. Hazards of weather are more significant. Conditions that are tolerable in daylight may be disastrous during reduced visibility.

(2) Minesweeping. When conducted during darkness minesweeping cannot be expected to give complete channel or area clearance.

(3) Underwater Demolition Team and Landing Force Reconnaissance Unit Operations.

(a) Underwater demolition team reconnaissance should be conducted prior to D-day. However when underwater demolition teams can be employed only just prior to the landing, their value lies mainly in locating and marking the proper landing beaches, making surf reports, and in assault demolition operations just prior to H-hour.

(b) Landing force reconnaissance units may be introduced covertly into the objective area. These units, either prior to and/or during the ship-to-shore movement, conduct reconnaissance and pathfinder missions in support of the landing force.

(4) Navigation and Control.

(a) Since landing the troops at the proper places at the proper times is even more important under conditions of reduced visibility, emphasis must be placed on precise navigation. Consistent with the conditions under which the landing is being executed, all appropriate means available must be used to ensure the correct positioning and guidance of all units participating. For example, radar silence may obtain.

(b) In addition to the foregoing, the effective employment of helicopters for the ship-to-shore movement is dependent upon the ability to position navigational aids and control personnel for the approach and landings. Depending on the situation it may be possible to employ parachute-landed or helicopterborne pathfinder teams to install the necessary navigational aids. The nature of the terrain and the degree of darkness are also determining factors in helicopter operations during reduced visibility.

(5) Protection. Low visibility conditions provide a measure of passive defense to the amphibious task force against air and surface attack. However, these same conditions impose restrictions on the conduct of active defense. Detailed protective measures, including specially organized defense forces and patrols are frequently necessary.

(6) Special Preparations and Equipment. Special visual signal apparatus of directional and secure nature is required. Provision is normally made for screened identification lights, luminous markings, radar beacons, radar reflectors and portable radio

direction finders. All equipment is prepared to reduce noise to the minimum.

(7) Ship-to-Shore Movement. The helicopter-borne ship-to-shore movement conducted under reduced visibility requires additional navigational and terminal control facilities as noted in subparagraph (4) above. Techniques of water-borne ship-to-shore movement are modified for conditions of reduced visibility. In order to preserve tactical surprise, radio silence is continued until the last possible moment before the landing of the first scheduled wave, or until it is reasonably certain that the force has been discovered. Sound equipment, screened colored lights for identification and signaling, lucite wands, and flashlights with colored filters are used to control the waves. If possible, the use of radio is restricted to that necessary for vectoring boat waves. Lines of departure may be nearer the beaches than in daylight operations. Transports, approach lane marker ships, and primary control ships track waves by radar and, when necessary, vector them by voice radio. Radar equipped boats may be used to lead waves into the beaches. Personnel with beach marker lights are included in the first wave on each beach to mark the center of each beach; they may, when possible, precede the first wave ashore.

(8) Naval Gunfire. The preliminary bombardment must not divulge the intended places of landing and

thereby sacrifice surprise. Preliminary bombardment emphasizes the destruction of the defender's radar and other deception devices. Effective close support of troops ashore by naval gunfire can be accomplished by the use of radar beacons, and by special training of fire support ships and shore fire control parties. Sight contact, or positive radar plot of the leading wave, is required if fire is to be delivered on the beaches or landing zones just prior to H-hour.

(9) Air Support. Preassault air operations must be designed so as not to disclose either the intent to land or the selected landing area. Timing air strikes on the actual landing beaches or landing zones just prior to H-hour is difficult, since pilots may not be able to observe the approaching waves during darkness. Close support for troops ashore can be delivered by utilizing suitable means for identifying targets and bomb lines and compatible electronic control systems such as the air support radar teams.

2030 REHEARSALS FOR LANDINGS IN REDUCED VISIBILITY

Because of the special considerations involved in landings under conditions of reduced visibility and the detailed coordination required in their execution, extensive rehearsals are required to ensure readiness of all participating elements for the operation.

CHAPTER 21

COLD WEATHER OPERATIONS

CONTENTS

2100 CHARACTERISTICS

CHAPTER 21

COLD WEATHER OPERATIONS

2100 CHARACTERISTICS

a. Amphibious operations conducted under cold weather conditions, and in sea-ice areas, follow the same basic principles as amphibious operations under other conditions. Cold weather amphibious operations, however, impose certain limitations on the amphibious task force because of reduced visibility; effects of sea-ice on ships, landing craft and amphibian vehicle mobility; possible loss or decreased reliability of communications; effects of low temperatures on personnel and materiel efficiency; and poor cross-country mobility. These limitations require careful and detailed consideration during planning and preparation for cold weather amphibious operations, to include provision for:

(1) Adaptation and preparation of ships, aircraft, landing craft, vehicles and equipment for operations under conditions of extreme cold.

(2) Adequate and flexible plans for logistic support of the Navy forces and landing force during the operation.

(3) Special equipment and supplies required for the landing and operations ashore.

(4) Training of personnel in survival, special operating techniques and procedures, and maintenance of equipment. (See Naval Arctic Operations Handbook, Parts I and II, Ch. 10; Manual of Ice Seamanship (H.O. No. 551); Cold Weather Operating Procedures, NWP 35 and other appropriate service publications.)



ANNEX A

GLOSSARY OF TERMS AND DEFINITIONS

A

ADMINISTRATIVE GROUP. The agency which is responsible for administrative and special details in the objective area: repair and salvage, hydrographic surveys, laying of nets, buoys and beacons, initial harbor development and control, port control, port control functions, boat pools, mail, and other tasks as assigned.

ADMINISTRATIVE LOADING. A loading system which gives primary consideration to achieving maximum utilization of troop and cargo space without regard for tactical considerations. Equipment and supplies must be unloaded and sorted before they can be used.

ADMINISTRATIVE PLAN. A plan that relates to and accompanies the landing force operation plan and which provides information and instructions relating to the logistical and administrative support of the operation.

ADVANCE FORCE. A temporary organization within the amphibious task force which precedes the main body to the objective area. Its function is to participate in preparing the objective for the main assault by conducting such operations as reconnaissance, seizure of supporting positions, minesweeping, preliminary bombardment, underwater demolition operations, and air operations.

AIR AND NAVAL GUNFIRE LIAISON COMPANY (ANGLICO). An organization composed of Marine and Navy personnel specially qualified for shore control of naval gunfire and close air support.

AIR DELIVERY. The delivery of supplies and equipment by aircraft wherever delivery is accomplished from the aircraft in flight.

AIR SUPPORT FORCE. A task organization formed to include all Air Force units when such units constitute the preponderance of tactical aviation assigned to the amphibious task force.

AIR SUPPORT FORCE COMMANDER. The Air Force officer designated in the initiating directive to command the Air Support Force when formed as part of the amphibious task force.

AIR TRANSPORT GROUP. A task organization of transport aircraft units which provides air transport for landing force components or provides logistic support.

AMPHIBIAN VEHICLE. A wheeled or track-laying vehicle capable of operating on both land and water.

AMPHIBIOUS COMMAND SHIP. A naval vessel from which a commander exercises control in amphibious operations. It is designed primarily to fulfill communications requirements for control of surface, subsurface, and air units engaged in the landing and supporting of landing forces. It provides planning and supporting facilities such as aerological, photographic and map reproduction equipment.

AMPHIBIOUS DEMONSTRATION. A lesser included type of amphibious operation conducted for the purpose of deceiving the enemy by a show of force with the expectation of deluding the enemy into a course of action unfavorable to him.

AMPHIBIOUS FORCE. (1) A general term used to describe the naval force and landing force, together with supporting forces, that are trained, organized and equipped to conduct an amphibious operation. (2) In naval usage, the administrative title of the amphibious type command of a fleet.

AMPHIBIOUS LIFT. The total capacity of assault shipping used in an amphibious operation, expressed in terms of personnel, vehicles, and measurement or weight tons of supplies. (See assault shipping)

AMPHIBIOUS OBJECTIVE AREA. A defined geographical area within which is located the area or areas to be captured by the amphibious task force. It is delineated in the initiating directive in terms of sea, land, and air space.

AMPHIBIOUS OPERATION. An attack launched from the sea by naval and landing forces, embarked in ships or craft involving a landing on a hostile shore.

AMPHIBIOUS PLANNING. The process of planning for an amphibious operation, distinguished by the necessity for concurrent, parallel and detailed planning by all participating forces; and wherein the planning pattern is cyclical in nature, comprising a series of analyses and judgments of operational situations, each stemming from those that have preceded.

AMPHIBIOUS SHIPPING. See Amphibious Lift and Assault Shipping.

AMPHIBIOUS RAID. A lesser included type of amphibious operation: a landing from the sea on a hostile shore involving swift incursion into, or a temporary occupancy of an objective, followed by a planned withdrawal.

AMPHIBIOUS RECONNAISSANCE. A general term relating to a landing conducted by minor elements, involving stealth rather than force of arms, for the purpose of securing information, followed by a planned withdrawal.

AMPHIBIOUS TASK FORCE. The task organization formed for the purpose of conducting an amphibious operation. The amphibious task force always includes navy forces and a landing force, with their organic aviation.

AMPHIBIOUS TASK FORCE COMMANDER. The Navy officer designated in the initiating directive as commander of an amphibious task force.

AMPHIBIOUS WITHDRAWAL. A lesser included type of amphibious operation involving the withdrawal of forces by sea in naval ships or craft from a hostile shore.

AMPHIBIAN VEHICLE AVAILABILITY TABLE. A tabulation of the type and number of amphibian vehicles available primarily for assault landings, and secondarily for support of other elements of operation.

AMPHIBIAN VEHICLE EMPLOYMENT PLAN.

A plan which indicates in tabular form the planned employment of amphibian vehicles, including their employment after the initial movement to the beach.

AMPHIBIAN VEHICLE LAUNCHING AREAS.

Areas located in the near vicinity and to seaward of the line of departure to which landing ships proceed and launch amphibian vehicles.

ANGLICO. See Air and Naval Gunfire Liaison Company.

ANTISUBMARINE SCREENING AREA. An area within which the air and surface elements of the area antisubmarine screen operate to protect the amphibious shipping and the fire support units in support of the assault.

APPROACH LANES. Extensions of the boat lanes from the line of departure toward the transport area. They may be terminated by marker ships, boats, or buoys.

APPROACH LANE CONTROL OFFICER. An officer embarked in the approach lane marker ship responsible for controlling the movement of waves between the seaward end of the approach lane and the line of departure.

APPROACH SCHEDULE. The schedule which indicates for each scheduled wave the time of departure from the rendezvous area, from the line of departure, and from other control points and the time of arrival at the beach.

APPROACH AND RETIREMENT ROUTE. The track or series of tracks relative to the earth's surface over which helicopters move to and from a specific landing site or landing zone.

ASSAULT AREA. That area which includes the beach area, the boat lanes, the lines of departure, the landing ship areas, the transport areas, and the fire support areas in the immediate vicinity of the boat lanes.

ASSAULT AREA DIAGRAM. A diagram containing extracts from other pertinent landing forms, and normally showing diagrammatically the beach designations, the boat lanes, the organization of the lines of departure, the scheduled waves, the landing ship area, the transport areas, and the fire support areas in the immediate vicinity of the boat lanes.

ASSAULT PHASE. The period between the arrival of the major assault forces of the amphibious task force in the objective area and the accomplishment of the amphibious task force mission.

ASSAULT SCHEDULE. The schedule which prescribes the formation, composition and timing of waves landing over the beaches.

ASSAULT SHIPPING. Shipping assigned to the amphibious task force, and utilized for transporting assault troops, vehicles, equipment, and supplies to the objective area.

ASSAULT WAVES. See Scheduled Waves.

ASSEMBLY AREAS. Areas designated for assembling empty landing craft prior to their being called alongside a ship for loading.

ATTACK GROUP. A subordinate task organization of the Navy forces of the amphibious task force. It is composed of assault shipping, and supporting naval units designated to transport, protect, land, and support a landing group.

B

BASIC DECISIONS. Those decisions which must be made at the highest level within an amphibious task force before detailed planning for an amphibious operation can proceed.

BASIC TACTICAL ORGANIZATION. The conventional organization of landing force units for combat, involving combinations of infantry, supporting ground arms and aviation for accomplishment of missions ashore. This organizational form is employed as soon as possible following the landing of the various assault components of the landing force.

BATTALION LANDING TEAM. In an amphibious operation, an infantry battalion, or comparable unit, reinforced by necessary combat and service elements; the basic troop unit in an assault landing.

BEACH. The area extending from the shoreline inland to a marked change in physiographic form or material, or to the line of permanent vegetation (coastline). (See Landing Site and Landing Beach).

BEACH CAPACITY. An estimate, expressed in terms of measurement tons or weight tons, of the cargo that may be unloaded on a designated strip of shore per day.

BEACH GROUP, NAVAL. A permanently organized naval unit, consisting of a headquarters unit, beachmaster unit, amphibious construction battalion, and boat unit, designed to provide an administrative group from which may be drawn: (1) elements required for accomplishment of certain pre-D-day and D-day missions; (2) elements organized as the beach party unit of the shore party; (3) a naval task element to which may be attached other naval units to perform tasks afloat or ashore in the objective area.

BEACHHEAD. A designated area on a hostile shore which, when seized and held, ensures the continuous landing of troops and material and provides the maneuver space for operations ashore requisite to accomplishment of the amphibious task force mission.

BEACH PARTY. The naval element of the shore party which provides close offshore control to facilitate beaching of landing craft, landing ships, and amphibian vehicles. It assists as required in the retraction and salvage of landing craft and landing ships and provides facilities for communicating with the naval forces afloat.

BEACH MARKER. A sign or device used to identify a beach, or certain activities thereon, for incoming waterborne traffic. Markers may be panels, lights, buoys, or electronic devices.

BEACHMASTER UNIT. A commissioned naval unit, subordinate to the commander, naval beach group, designated to provide the shore party a naval element known as a beach party which is capable of supporting the landing of one division composed of three regimental landing teams or equivalent. (See Beach Party, Shore Party.)

BLOCK STOWAGE. A method whereby an assortment of various kinds of equipment or supplies is made up and loaded together. Thus, a balanced proportion of the entire cargo may be discharged without disturbing the remainder of the cargo.

BLT. See Battalion Landing Team.

BOAT DIAGRAM. A diagram showing the positions of individuals and equipment in each landing craft.

BOAT FLOTILLA. An organization of two or more boat groups, organized to facilitate control when the operation of two or more boat groups demands the presence of a common commander.

BOAT GROUP. The basic organization of landing craft. One boat group is organized for each battalion landing team (or equivalent) to be landed in the first trip of landing craft or amphibian vehicles.

BOAT LANES. Lanes which extend seaward from the landing beaches to the line of departure. The width of the boat lanes is determined by the length of the corresponding beach.

BOAT SPACE. The space and weight factor used to determine the capability of boats and landing craft. With respect to landing craft, it is based on the requirements of one man and his individual equipment. He is assumed to weigh 224 pounds and to occupy 13.5 cubic feet of space.

BOAT TEAM. The troops assigned to one landing craft or amphibian vehicle for the ship-to-shore movement in an amphibious operation.

BOAT UNIT. A permanently commissioned naval organization, subordinate to the commander naval beach group, which contains landing craft and crews necessary to provide additional lighterage required in an amphibious operation.

BOAT WAVE. A boat wave consists of the landing craft or amphibian vehicles within a boat group which carry the troops that are to be landed simultaneously.

BOMB LINE. An imaginary line which delineates the rear limits of a zone of general air action. This line is designated by the appropriate troop commander and arranged, if possible, to follow well-defined geographical features. Forward of this line, air strikes against enemy surface targets may be conducted at the discretion of the tactical (or strategic) air commander without other coordination. To the rear of this line, all air strikes against enemy surface targets must be controlled by the close air support control system and must be:

- a. Requested or approved by the appropriate troop commander.
- b. Integrated with the fire and movement of the supported unit, including its other supporting arms.

BREAKUP POINT. An air control point at which helicopters returning from a landing zone break formation and are released to return to base, or are dispatched for other employment.

C

CALL FIRE. Fire delivered on a specific target in response to a request from the supported unit.

CALL MISSION. A type of air support mission which is not requested sufficiently in advance of the desired time of execution to permit detailed planning and briefing of pilots prior to take-off. Aircraft scheduled for this type of mission are on air, ground, or carrier alert, and are armed with a prescribed load.

CASUALTY EVACUATION CONTROL BERTH. A berth established for a ship specially equipped for handling casualties in which a casualty evacuation control officer is embarked.

CASUALTY EVACUATION CONTROL OFFICERS. Medical officers designated to control and coordinate the seaward evacuation of casualties from assigned beaches. They are initially embarked in control ships and, when the situation permits, transfer to specially designated evacuation control ships located off the landing beaches.

CAUSEWAY LAUNCHING AREA. Areas located near the line of departure but clear of the approach lanes, where ships can launch pontoon causeways.

CENTRAL CONTROL OFFICER. The officer designated by the amphibious task force commander for the over-all coordination of the waterborne ship-to-shore movement. He is embarked in the central control ship.

CLASSES OF TARGETS. See Target Priority.

CLOSE AIR SUPPORT. Air action against hostile ground and naval targets which are so close to friendly forces as to require detailed integration of each air mission with the fire and maneuver of those forces and with supporting fires.

CLOSE COVERING GROUP. A task organization which provides protection against attack by aircraft and surface ships. It is ordinarily composed of battleships, cruisers, destroyers, and aircraft carriers, as needed.

CLOSE SUPPORT AREAS. Those parts of the ocean operating areas nearest to, but not necessarily in, the objective area. They are assigned to naval support carrier groups, hunter-killer groups and certain logistic support components.

CLOSE SUPPORT FIRE. Fire delivered on targets which are in such close proximity to friendly forces, as to require detailed integration with the movement of those forces.

CLOSE SUPPORT MISSION. A mission with the primary purpose of close support of friendly ground forces in the accomplishment of their immediate task and/or the prevention of front line enemy forces from accomplishing their missions. Close coordination of air, naval, and ground activities is required prior to and during the mission. This coordination may include ground-to-air-control, air-to-air control, and the positive establishment of bombing, strafing, and no-fire lines or zones prior to the mission. All available fire support means may be employed in close support missions.

COMBAT CARGO OFFICER. An officer assigned to major amphibious ships or naval staffs specially trained in the technique of planning and supervision of loading for an amphibious operation. (See Embarkation Officer.)

COMBAT LOADING. A method of loading which gives primary consideration to the facility with which troops, equipment, and supplies can be unloaded ready for combat on landing, rather than to the economical utilization of ship space.

COMBAT ORGANIZATIONAL LOADING. A method of loading by which a unit with its equipment and initial supplies is loaded into a single ship, together with other units, in such a manner as to be available for unloading in a predetermined order.

COMBAT SERVICE SUPPORT TROOPS. Landing force units which render support to combat units in supply, maintenance, transportation, evacuation, hospitalization, and related service matters.

COMBAT SPREAD LOADING. A method of combat loading by which some of the troops, equipment, and initial supplies of a unit are loaded in one ship and the remainder are loaded in one or more others. This method is commonly used for troop units with heavy equipment.

COMBAT SUPPORT TROOPS. Those landing force units whose primary mission is to furnish operational assistance for the combat units.

COMBAT TROOPS. Those landing force units whose primary mission is destruction of enemy forces and/or installations.

COMBAT UNIT LOADING. A method of loading by which all or a part of a combat unit, such as an assault battalion landing team, is completely loaded in a single ship, with essential combat equipment and supplies, in such a manner as to be immediately available to support the tactical plan upon debarkation, and to provide a maximum of flexibility to meet possible changes in the tactical plan.

COMMODITY LOADING. A method of loading in which various types of cargo, such as ammunition, rations, or boxed vehicles, are loaded together in order that each commodity can be discharged without disturbing the others.

CONCENTRATED MOVEMENT PATTERN. A pattern for surface ship-to-shore movement which provides for concentration of landing craft. This pattern is used when atomic weapon threat is not a major factor.

CONDUCT OF FIRE. The technique by which effective fire is placed on a selected target.

CONSTRUCTION BATTALION, AMPHIBIOUS (PHIBCB). A commissioned naval unit, subordinate to the commander, naval beach group, designed to provide an administrative unit from which personnel and equipment are formed in tactical elements and made available to appropriate commanders to operate pontoon causeways, transfer barges, and warping tugs; and to meet salvage requirements of the naval beach party.

CONTROL OF FIRES. The control function involving the assignment of fire support missions directly to the fire unit, including supervision over the execution of these missions.

CONTROL GROUP. Personnel, ships, and craft designated to control the waterborne ship-to-shore movement.

CONVOY LOADING. The loading of troop units with their equipment and supplies in vessels of the same movement group, but not necessarily in the same ship.

COUNTER AIR OPERATIONS CENTER (CAOC). A subordinate element of the Marine air control system which is responsible for direction of air defense operations in its assigned sector of responsibility.

COUNTERBATTERY FIRE. Fire delivered against active enemy weapons and/or fire control stations.

COUNTERPREPARATION FIRE. Fire delivered in anticipation of an enemy attack, designed to break up enemy formations; disorganize the enemy systems of command, communication, and observation; decrease the effectiveness of his preparation; and impair his offensive spirit.

COVERING AIR OPERATIONS. Air operations conducted outside the objective area but which directly affect the amphibious operation by providing protection for the amphibious task force en route to and in the objective area.

COVERING FIRE. Fire delivered prior to the landing to cover preparatory operations such as underwater demolitions and minesweeping.

D

DEBARKATION. The unloading of troops, equipment, or supplies from a ship or aircraft.

DEBARKATION SCHEDULE. A schedule which provides for the orderly debarkation of troops and equipment and emergency supplies for the waterborne ship-to-shore movement.

DEEP AIR SUPPORT. Air action against enemy targets at such distance from friendly forces that detailed integration of each air mission with fire and movement of friendly forces is not required.

DEEP SUPPORT FIRE. Fire delivered in order to neutralize or destroy enemy reserves and long range weapons, and to interdict enemy command, communication, supply and other support facilities not in the immediate vicinity of friendly forces.

DELIBERATE FIRE. Fire delivered at a rate intentionally less than normal to permit adjustment corrections, meet specific tactical requirements, or conserve ammunition.

DEMONSTRATION GROUP (FORCE). A component of an amphibious task force organized to conduct operations intended to deceive the enemy. (See Amphibious Demonstration.)

DEPARTURE POINT. An air control point at the seaward end of the helicopter approach lane system from which helicopter waves are dispatched along the selected approach lane to the initial point.

DESTRUCTIVE FIRE. Precision gunfire delivered for the purpose of destroying a target, usually a material object.

DIRECT AIR SUPPORT CENTER (DASC). A subordinate operational component of the Marine air control system designed for control and direction of close air support and other direct air support operations. It is under the operational control of a tactical air control or tactical air direction center, as appropriate.

DIRECT FIRE. Gunfire delivered on a target, using the target itself as a point of aim for either the guns or the director.

DIRECT SUPPORT FIRE. Artillery or naval gunfire delivered in support of a particular subdivision of a unit, as opposed to a general support fire which is delivered in support of a unit as a whole. It includes call fire missions conducted and adjusted by the shore fire control party of the supported unit.

DISPERSED MOVEMENT PATTERN. A pattern for ship-to-shore movement which provides additional separation of landing craft both laterally and in depth. This pattern is used when nuclear weapon threat is a major factor.

DROP ZONE. A specified area upon which airborne troops, equipment, and supplies are dropped by parachute, or on which supplies and equipment may be delivered by a free fall.

DUMP. A temporary stock of supplies or a place of storage established in the field or afloat where military supplies are held temporarily. When supplies are issued from dumps, the latter become distributing points.

E

EMBARKATION ELEMENT. Two or more embarkation teams grouped together to conform to the organization for landing. A transport element/landing ship element is the parallel naval echelon.

EMBARKATION GROUP. Two or more embarkation units (when formed), or embarkation elements (when units are not formed), or a combination of embarkation elements and embarkation units which conform to the organization for landing. A transport group is the parallel naval echelon.

EMBARKATION OFFICER. An officer serving on the special staff of the landing force who advises the commander thereof on matters pertaining to embarkation planning, loading, and embarkation of the command aboard ships.

EMBARKATION PLANS. The plans prepared by the landing force and appropriate subordinate commanders containing instructions and information concerning the organization for embarkation, assignment to shipping, supplies and equipment to be embarked, location and assignment of embarkation areas, control and communication arrangements, movement schedules and embarkation sequence, and additional pertinent instructions relating to the embarkation of the landing force.

EMBARKATION PHASE. The period during which the forces, with their equipment and supplies, are embarked in the assigned shipping.

EMBARKATION TEAM. The troop units with their supplies and equipment embarked in a single ship.

EMBARKATION UNIT. Two or more embarkation elements grouped together to conform to the organization for landing. A transport unit/landing ship unit is the parallel naval echelon.

EVACUATION POLICY. A statement of policy, normally expressed in days, indicating the maximum period that a casualty may be held in the objective area for treatment. Patients who cannot be returned to duty within this prescribed period are evacuated provided the travel involved will not aggravate their disabilities.

F

FIRE SUPPORT AREAS. Areas in which fire support ships operate while providing gunfire support to the landing force.

FIRE SUPPORT COORDINATION CENTER. A single location in which are centralized troop communication facilities and personnel required for the coordination of artillery, air and naval gunfire. (See Supporting Arms Coordination Center.)

FIRE SUPPORT COORDINATOR. The officer in charge of the fire support coordination center (FSCC). He is the direct representative of the landing force commander.

FIRE SUPPORT GROUPS. Groups of battleships, cruisers, destroyers, rocket ships, and other types assigned to provide naval gunfire, rocket fire, and guided missile support for the landing and subsequent operations ashore.

FLATTED CARGO. Cargo placed in the bottom of holds, covered with planks and dunnage, and held for future use. Flatted cargo frequently serves in lieu of ballast.

FLOATING DUMP. Emergency supplies pre-loaded in landing craft amphibian vehicles, or in landing ships. Floating dumps are located in the vicinity of the appropriate control officer who directs their landing as requested by the troop commander concerned.

FOLLOW-UP SHIPPING. Ships not originally a part of the amphibious task force but which deliver troops and supplies to the objective area after the assault phase has begun.

FORWARD AIR CONTROLLER. An officer (aviator) member of a tactical air control party who controls close air support missions from a forward observation post on the ground.

G

GENERAL SUPPORT FIRE. Those artillery and naval gun fires delivered for the support of the landing force as a whole by ships or artillery units not providing direct support.

GENERAL UNLOADING PERIOD. That part of the ship-to-shore movement in which unloading is primarily logistic in character, and emphasizes speed and volume of unloading operations. It encompasses the unloading of units and cargo from the ships as rapidly as facilities on the beach permit. It proceeds without regard to class, type, or priority of cargo, as permitted by cargo handling facilities ashore. (See Initial Unloading Period.)

H

HARASSING FIRE. Fire of less intensity than neutralization fire, designed to inflict losses; or, by threat of losses, to curtail enemy movement, disturb rest, and, in general, to lower his morale.

HELICOPTER AVAILABILITY TABLE. A tabulation of the number and types of helicopters available for a proposed helicopter operation. The table is used as a basis upon which the helicopter-borne unit determines the employment of available helicopters early in the planning phase.

HELICOPTER DIRECTION CENTER. An air operations installation under the over-all control of the TACC, TADC or DASC, as appropriate, from which control and direction of helicopter operations are exercised.

HELICOPTER ENPLANING SCHEDULE. A schedule which provides for the orderly enplaning of troops, supplies and equipment for the helicopter-borne ship-to-shore movement.

HELICOPTER EMPLOYMENT AND ASSAULT LANDING TABLE. A document which contains the detailed plans for the movement of helicopter-borne troops, equipment, and supplies.

HELICOPTER FLIGHT. An individual helicopter, or two or more helicopters grouped under a flight leader and launched from a single helicopter transport or base at approximately the same time.

HELICOPTER FLIGHT RENDEZVOUS. An air control point in the vicinity of a helicopter transport or base where helicopters are assembled into flights prior to proceeding to the wave rendezvous. It is designated by code name.

HELICOPTER LANDING DIAGRAM. A diagram which portrays graphically routes to and from landing zones and the helicopter transports.

HELICOPTER SUPPORT TEAM. A task organization which is formed and equipped for employment in a landing zone to facilitate landing and movement of helicopter-borne troops, equipment and supplies and to evacuate selected casualties and prisoners of war. It may be built around a nucleus of shore party and helicopter landing zone control personnel.

HELICOPTER TEAM. See Heliteam.

HELICOPTER TRANSPORT AREAS. Areas, to the seaward and on the flanks of the outer transport and landing ship areas, but preferably inside the area screen, to which helicopter transports proceed and launch or recover helicopters.

HELICOPTER WAVE. One or more helicopters grouped under a single leader and scheduled to land in the same landing zone at approximately the same time. A helicopter wave is composed of one or more flights and can consist of helicopters from more than one ship.

HELICOPTER WAVE RENDEZVOUS. An air control point where helicopter flights are assembled into helicopter waves prior to executing a mission. It is designated by a code name.

HELITEAM. The troops and equipment lifted by one helicopter in one flight.

HELITEAM WAVE AND SERIAL ASSIGNMENT TABLE. A table which indicates the tactical units, equipment, and supplies that are to be loaded into each helicopter. The table identifies each heliteam with its assigned serial number, and the serial number with the flight and wave.

HORIZONTAL LOADING. A type of loading whereby items of like character are loaded in horizontal layers throughout the hold or holds of a ship.

HORIZONTAL STOWAGE. The lateral distribution of unit equipment or categories of supplies so that they can be unloaded simultaneously from two or more holds.

I

INDIRECT FIRE. Fire delivered on a target which is not itself used as a point of aim for the guns or the director.

INITIAL POINT. As used in helicopter operations, an air control point in the vicinity of a landing zone from which individual flights of helicopters are dispatched directly to their prescribed landing sites.

INITIAL UNLOADING PERIOD. That part of the ship-to-shore movement in which unloading is primarily tactical in character and must be instantly responsive to landing force requirements. (See General Unloading Period.)

INITIATING DIRECTIVE. The directive initiating an amphibious operation, issued by a commander of a command established by the Joint Chiefs of Staff or by other commanders so authorized by the Joint Chiefs of Staff or by other higher authority.

INNER TRANSPORT AREAS. Areas as close to the landing beaches as depths of water, navigational hazards, boat traffic, and enemy action permit, to which transports may move to expedite unloading.

L

LANDING AREA. That part of the objective area within which are conducted the landing operations of an amphibious task force. It comprises the sea, air and land areas required for executing and supporting the landing and establishing the beachhead selected by the landing force commander.

LANDING BEACH. That portion of a usable coastline usually required for the assault landing of a battalion landing team (BLT) or similar unit. However, it may also be that portion of a shore line constituting a tactical locality, such as the shore of a bay, over which a force smaller than a battalion landing team may be landed.

LANDING CRAFT. A shipborne craft used in amphibious assault operations, specifically designed for carrying troops and equipment and for beaching, unloading, and retracting.

LANDING CRAFT AND AMPHIBIAN VEHICLE ASSIGNMENT TABLE. A table which indicates the organization of landing force units into boat teams, and the assignment of boat teams to a wave or to a nonscheduled unit.

LANDING CRAFT AVAILABILITY TABLE. A tabulation of the types and number of landing craft available from each ship in the transport organization for use in the ship-to-shore movement.

LANDING CRAFT EMPLOYMENT PLAN. The plan for the assignment and movement of landing craft from the various ships to satisfy naval and landing force requirements.

LANDING DIAGRAM. A graphic means of illustrating the plan for the ship-to-shore movement of a battalion landing team or similar unit.

LANDING FORCE. A task organization of troop units, aviation and ground, assigned to conduct the amphibious assault. It is the highest troop echelon in the amphibious operation.

LANDING FORCE COMMANDER. The officer designated in the initiating directive to command the landing force.

LANDING FORCE SUPPLIES. Those supplies remaining in assault shipping after initial combat supplies and floating dumps have been unloaded. They are landed selectively in accordance with the requirements of the landing force until the situation ashore permits the inception of general unloading.

LANDING GROUP. A subordinate task organization of the landing force. It is composed of especially organized, trained and equipped troops, including their aviation, capable of conducting landing operations against a position or group of positions so located as to permit their capture by troops operating under a single tactical command. It is formed only when circumstances demand.

LANDING PLAN. See Plan for Landing.

LANDING SEQUENCE TABLE. A document which incorporates the detailed plans for ship-to-shore movement of nonscheduled units.

LANDING SHIP. A large type of assault which is designed for long sea voyages and for rapid unloading over and onto a beach.

LANDING SITE. (1) A continuous segment of coast line over which troops, equipment, and supplies can be landed by surface means. (See Beach and Landing Beach.) (2) A designated area, within a landing zone, where helicopters can land.

LANDING ZONE. A specified zone within an objective area used for the landing of assault aircraft, including helicopters.

LINE OF DEPARTURE. A suitably marked off-shore coordinating line to assist assault craft to land on designated beaches at scheduled times.

LOADING. The actual placement of troops, equipment and supplies into ships, aircraft and trains. (See Combat Loading, Combat Unit Loading, Combat Spread Loading, Commodity Loading, Convoy Loading, Horizontal Loading, Vertical Loading, Selective Unloading.)

LOADING PLAN. (1) The Navy plan covering the organization of Navy forces for loading and including the schedule of arrival and departure of amphibious shipping from embarkation points. (2) Detailed embarkation team plans providing for the combat loading of personnel, equipment and/or supplies to be loaded in the ship embarking the embarkation team.

LOD. See Line of Departure.

LOGISTIC SUPPORT AREAS. Those areas ashore which contain the necessary supplies, equipment, installations, and elements which are required to support the landing force logistically throughout the operation.

M

MARINE AIR SUPPORT SQUADRON (MASS). Provides and operates Direct Air Support Center (DASC) facilities for the control of aircraft operating in close air support. There is one such squadron per Marine Wing Headquarters Group. It includes two air support radar teams (ASRT).

MARINE AIR CONTROL SQUADRON (MACS).

Installs, maintains, and operates ground facilities for the detection and interception of hostile aircraft and guided missiles and for the navigational direction of friendly aircraft in the accomplishment of support missions. The Marine Wing Headquarters Group contains the MACS. Each such squadron can establish a Counter Air Operations Center (CAOC).

MARKER SHIP. In an amphibious operation, a ship which takes accurate station on a designated control point. It may fly identifying flags by day and show lights to seaward at night.

MINE WARFARE GROUP A task organization of ships which conducts offensive and defensive mine operations in support of the amphibious task force.

MOVEMENT PLAN. The naval plan providing for the movement of the amphibious task force to the objective area. It includes information and instructions concerning departure of ships from loading points, the passage at sea, and the approach to and arrival in assigned positions in the objective area.

MOVEMENT PHASE. The phase in which various components of the amphibious task force move from the points of embarkation to the objective area. This phase is completed when the components of the amphibious task force arrive in their assigned positions in the objective area.

N

NAVY TACTICAL AIR CONTROL SQUADRON (TACRON). An administrative and tactical element of the Navy tactical air control group. It provides the personnel to man the control facilities for the ship-based tactical air control center or tactical air direction center.

NO-FIRE LINE. A line short of which artillery or ships do not fire except on request of the supported commander, but beyond which they may fire at any time without danger to friendly troops.

NON-SCHEDULED UNITS. Units of the landing force held in readiness for landing during the initial unloading period, but not included in either scheduled or on-call waves. This category usually includes certain of the combat support units and most of the combat service support units with higher echelon (division and above) reserve units of the landing force. Their landing is directed when the need ashore can be predicted with a reasonable degree of accuracy.

O

OBJECTIVE AREA. See Amphibious Objective Area.

OBSERVED FIRE PROCEDURE. A standardized procedure for use in adjusting indirect fire on a target.

ON-CALL WAVES. Formations of landing craft, amphibian vehicles, landing ships or helicopters carrying those elements of the landing force for which an early need ashore is anticipated, but whose time and place of landing cannot be accurately predicted and therefore, are not specified.

ORGANIZATION FOR EMBARKATION. The administrative grouping of the landing force for the overseas movement. It includes, in any vessel or embarkation group, the task organization which is established for landing as well as additional forces embarked for purposes of transport, labor or for distribution to achieve a maximum of security.

ORGANIZATION FOR LANDING. The specific tactical grouping of the landing force for the assault.

OUTER LANDING SHIP AREAS. Areas to which landing ships proceed initially after their arrival in the objective area. They are usually located on the flanks of the outer transport areas.

OUTER TRANSPORT AREA. Area inside the area submarine screen to which assault transports proceed initially after arrival in the amphibious objective area.

P

PARALLEL CHAINS OF COMMAND. A parallel system of command, responding to the inter-relationship of naval and landing force tasks, wherein corresponding commanders are established at each subordinate level of both components to facilitate coordinate planning for, and execution of, the amphibious operation.

PATROL PLANE GROUP. A task organization of patrol aircraft units which conduct such missions as scouting, reconnaissance, and anti-submarine operations while the amphibious task force is en route to, and in, the objective area.

PLAN FOR LANDING. A collective term referring to all the individually prepared naval and landing force documents which, taken together, present in detail all instructions for execution of the ship-to-shore movement.

PLANNING DIRECTIVE. The plan issued by the amphibious task force commander, following receipt of the initiating directive, to insure that the planning process and interdependent plans developed by the amphibious task force headquarters and assigned major forces will be coordinated, the plan completed in the time allowed, and important aspects not overlooked.

PLANNING MEMORANDA. Memoranda containing fragmentary information and instructions issued by a commander in advance of formal plans to ensure that subordinate commanders are in possession of all available details which will affect their own planning.

PLANNING PHASE. The period extending from issuance of the initiating directive to embarkation.

PLANNING PROGRAM. The program prepared and issued by a commander which prescribes the schedule of planning events for his staff.

PREARRANGED FIRE. Fire delivered on known or suspected targets in accordance with a planned schedule either on a time or on a call basis.

PREASSAULT OPERATIONS. Those operations conducted in the objective area by subordinate elements of the amphibious task force which are normally organized into an advance force. They include reconnaissance, minesweeping, bombardment bombing, underwater demolitions, and destruction of beach obstacles.

PRE-H-HOUR TRANSFER. The transfer of control and TacLog parties from their parent ships to assigned control ships, and the transfer of the necessary troops and accompanying equipment from transports to landing ships and/or transports in preparation for the ship-to-shore movement.

PRELANDING OPERATIONS. The initial events of the assault phase, encompassing (1) the continuation of similar preparation of the landing area initiated by an advance force (if employed), and (2) final preparation for the ship-to-shore movement.

PREPARATION FIRE. Fire delivered on a target preparatory to an assault.

PRIMARY CONTROL OFFICER. The officer embarked in a primary control ship assigned to control the movement of landing craft, amphibian vehicles, and landing ships to and from a colored beach.

PRIORITY SEQUENCE TABLE. A timetable showing the order in which ships of the sea echelon are to proceed to the transport area for unloading. The priority sequence table will normally show the scheduled time of arrival in the transport area and the berth assigned.

R

RATE OF ADVANCE. The average rate of movement of landing force units from beaches and/or landing zones toward initial landing force objectives, expressed in yards per hour.

RECONNAISSANCE AND UNDERWATER DEMOLITION GROUP. A task organization including ships, embarked reconnaissance troops and underwater demolition teams, which conduct reconnaissance, hydrographic surveys, and demolition of natural or man-made obstacles.

REGIMENTAL LANDING TEAM. In amphibious operations a task organization of an infantry regiment, battle group, or similar unit, reinforced by those elements which are required for initiation of its combat function ashore. This normally will embrace the assault battalion landing teams and a regimental landing team reserve.

REHEARSAL PHASE. The period during which the prospective operation is rehearsed for the purpose of (1) testing adequacy of plans, the timing of detailed operations, and the combat readiness of participating forces; (2) ensuring that all echelons are familiar with plans; and, (3) testing communications.

REINFORCED DIVISION. The basic landing force organization of combined arms capable of sustained combat.

RENDEZVOUS AREA. The area in which the landing craft and amphibian vehicles rendezvous to form waves after being loaded and prior to movement to the line of departure.

SACC. See Supporting Arms Coordination Center.

SCHEDULED FIRE. See Prearranged Fire.

SCHEDULED WAVES. Formations of landing craft, amphibian vehicles, landing ships, or helicopters carrying the assault units of the landing force whose time and place of landing are predetermined.

SCHEME OF MANEUVER. The tactical plan to be executed by the landing force ashore to seize the assigned objectives and thus accomplish the landing force mission. It includes provision for the integration of supporting fires with the maneuver of the ground forces.

SCREENING GROUP. A task organization of ships which furnishes protection to the amphibious task force en route to the objective area and during operations in the objective area.

SEA ECHELON. A portion of the assault shipping which withdraws from or remains out of the transport area during an amphibious landing and operates in designated areas to seaward in an on-call or unscheduled status.

SEA ECHELON AREA. An area to seaward of a transport area from which assault shipping is phased into the transport area, and to which assault shipping withdraws from the transport area.

SEA ECHELON PLAN. The plan for reduction of concentration of amphibious shipping in the transport area, to minimize losses due to enemy attack by mass destruction weapons and to reduce the area to be swept of mines.

SELECTIVE LOADING. The arrangement and stowage of equipment and supplies aboard ship in a manner designed to facilitate issues to units.

SELECTIVE UNLOADING. The controlled unloading from assault shipping and movement ashore of specific items of cargo on request of the landing force commander. Normally, selective unloading parallels the landing of non-scheduled units during the initial unloading period of the ship-to-shore movement.

SERIAL ASSIGNMENT TABLE. A table which contains the serial numbers in numerical order, the unit (or part) making up the serialized unit assigned to the waterborne ship-to-shore movement, the number of personnel in the unit, the ships from which the unit is to be unloaded, the material in the unit, the minimum number and smallest types of landing craft and/or amphibian vehicles which can land the unit, and special information.

SERIAL NUMBER. An arbitrary number assigned to each unit or grouping including its equipment, which is: (1) embarked entirely in one ship; (2) to be landed as a unit on one beach or helicopter landing zone; and (3) is to be landed at approximately the same time.

SHIP-TO-SHORE MOVEMENT. That part of the assault phase which pertains to the timely deployment of troops and their equipment from assault shipping to designated positions ashore in the landing area.

SHORE-BASED TACTICAL AIR GROUPS. Task organizations of tactical air units, assigned to the amphibious task force, which are to be shore-based within (or sufficiently close to) the objective area to provide tactical air support to the amphibious task force.

SHORE FIRE CONTROL PARTY (SFCP). A specially trained unit for control of naval gunfire in support of troops ashore, designed to adjust fire and to perform liaison functions for the supported unit commander.

SHORE PARTY. A task organization of the landing force formed for the purpose of facilitating the landing and movement off the beaches of troops, equipment, and supplies; for the evacuation from the beaches of casualties and prisoners of war; and for facilitating the beaching, retraction and salvaging of landing ships and craft. It comprises elements of both the naval and landing forces.

SPECIAL UNLOADING BERTH. Berths established in the vicinity of the approach lanes into which transports may move for unloading, thus reducing the running time for landing craft and assisting in the dispersion of transports.

SPLASH LINE. In UDT night operations, a point off the enemy beach at which swimmers are put into the water from the rubber boats. It must be sufficiently distant from the beach to allow completion of the task without detection.

STAGING AREA. An area which may be utilized en route from the embarkation area to the objective area for the purpose of logistics support, emergency repairs, redistribution of forces, and/or final rehearsal.

STOWAGE. The method of placing cargo into a single hold or compartment of a ship to prevent damage, shifting, etc. (See Block Stowage, Horizontal Stowage, Vertical Stowage.)

STOWAGE DIAGRAM A scaled drawing included in the loading plan of a vessel for each cargo stowage space on each deck or platform showing the exact location of all cargo within each hold. The diagram also contains the following data for each cargo space: over-all dimensions, location of obstructions, dimensions of the overhead hatch opening, minimum clearances to the overhead, bale cubic capacity, square feet of deck area, and capacity of booms.

SUBSIDIARY LANDING. A landing, usually made outside the designated landing area, the purpose of which is to support the main landing.

SUPPORT CARRIER GROUP. A task organization of aircraft carriers with embarked aircraft, and supporting ships, which provides naval air support to the amphibious task force.

SUPPORTING AIR OPERATIONS. All air operations which are directly related to the overseas movement and offensive operations of the amphibious task force.

SUPPORTING ARMS COORDINATION CENTER. A single location on board an amphibious task force (and attack group or advance force when appropriate) flagship in which communication facilities and personnel for the coordination of fire support of artillery, air, and naval gunfire are centralized. This is the naval counterpart of the fire support coordination center used by the landing force.

SUPPORTING ARMS COORDINATOR. The officer in charge of the supporting arms coordinating center (SACC). He is the direct representative of the Navy commander who is charged with supporting fires coordination at the time. He integrates the fire plans of the supporting arms to ensure their most effective use in furthering the landing force scheme of maneuver ashore.

T

TAC(A). See Tactical Air Coordinator (Airborne).

TACC. See Tactical Air Control Center.

TACG See Tactical Air Control Group.

TACLOG. See Tactical-Logistical Group.

TACRON. See Tactical Air Control Squadron.

TACTICAL AIR COMMANDER (AFLOAT). The officer (aviator), under the amphibious task force commander, who coordinates planning of all phases of air participation of the amphibious operation and air operations of supporting forces en route to and in the objective area. Until control is passed ashore, he exercises control over all operations of the tactical air control center (afloat) and is charged with: (1) control of all aircraft in the objective area assigned for tactical air operations, including offensive and defensive air; (2) control of all other aircraft entering or passing through the objective area; and (3) control of all air warning facilities in the objective area.

TACTICAL AIR CONTROL CENTER. The principal air operations installations (land-based or ship-based) from which all aircraft and air warning functions of tactical air operations are controlled.

TACTICAL AIR CONTROL GROUP(S). The Navy organization which provides tactical air control squadrons, as necessary, to perform the various functions afloat relating to the control of aircraft in amphibious operations.

TACTICAL AIR CONTROL PARTY (TACP). A troop facility for the integration, coordination, and employment of air support for the ground unit commander. It consists of an officer, or officers, who are qualified aviators, and communication personnel, to provide necessary communications and liaison between the unit in which it functions, and appropriate air control facilities and aircraft in flight in matters concerning air support.

TACTICAL AIR CONTROL SQUADRON. A subordinate administrative tactical element of a Navy tactical air control group. It provides the control facilities for the ship-based tactical air control center or the ship-based tactical air direction center.

TACTICAL AIR CONTROLLER. The officer (aviator) responsible to the tactical air commander for the internal functioning of the tactical air control center.

TACTICAL AIR COORDINATOR (AIRBORNE). An officer (aviator) who coordinates, from an airplane, the action of combat aircraft engaged in close support operations.

TACTICAL AIR DIRECTION CENTER. An air operations installation under the over-all control of the tactical air control center from which are directed aircraft and aircraft warning functions of tactical air operations.

TACTICAL AIR DIRECTOR. The officer in charge of all operations of the tactical air direction center. He is responsible to the tactical air controller for the direction of all aircraft and air warning facilities assigned to his area of responsibility. When operating independently of a tactical air control center, the tactical air director assumes the functions of the tactical air controller.

TACTICAL AIR OBSERVER (TAO). An officer trained as an air observer whose function is to observe from airborne aircraft and report on movement and disposition of friendly and enemy forces, on terrain, weather and hydrography, and to execute other missions as directed.

TACTICAL DECEPTION GROUP. A task organization which conducts deception operations against the enemy, including electronic, communication, visual, and other methods designed to misinform and confuse the enemy.

TACTICAL-LOGISTICAL GROUP. A group organized from personnel within the landing force to advise Navy control officers promptly of landing force requirements during the ship-to-shore movement.

TADC. See Tactical Air Direction Center.

TAO. See Tactical Air Observer.

TARGET LIST. A listing of selected targets, based on the best available intelligence, which are to be engaged by the supporting fires.

TARGET PRIORITY. A grouping of targets into classes according to priority for being attacked.

TRANSFER BERTH. A berth located off a landing beach in proximity to the transfer line. A crane-equipped ship or barge is usually stationed in the transfer berth to assist in transferring troops, supplies, and equipment from landing craft to amphibian vehicles.

TRANSFER LINE. A designated line to seaward of the surf line off a landing beach where personnel and material are transferred from landing craft to amphibian vehicles.

TRANSPORT AREA. See Inner Transport Area, Outer Transport Area.

TRANSPORT GROUP. A major subdivision of an amphibious task force, composed primarily of transports which provide for the embarkation, movement to the objective, landing and logistic support of the landing force.

TROOP STAGING AREA. A general locality, containing accommodations for units of the landing force, established for the concentration of these units preparatory to embarkation.

U

UNIT LOADING. See Combat Unit Loading.

V

VERTICAL LOADING. A type of loading whereby items of like character are loaded in vertical layers throughout the holds of a ship so that selected items are available at any stage of the unloading.

VERTICAL STOWAGE. A method of stowage in depth within a single compartment by which loaded items are continually accessible for unloading, and the unloading can be completed without corresponding changes or prior unloading of other cargo.

W

WAVE COMMANDERS. Officers assigned to form waves and control them in all subsequent movements under the direction of a boat group commander.

WAVE GUIDE. A wave guideboat with embarked wave guide officer to assist in the navigation of amphibian vehicles to the beach.

Z

WAVE NUMBER. The number assigned to surface and helicopter waves employed in the scheduled ship-to-shore movement. Waves are numbered successively from front to rear as first wave, second wave, etc.

ZONE OF RESPONSIBILITY. An area assigned to an individual ship or unit for gunfire support. Such ship or unit is responsible for destroying or neutralizing known enemy installations and for attacking targets of opportunity therein.



By Order of the Secretary of the Army:

G. H. DECKER
General, United States Army,
Chief of Staff.

Official:

J. C. LAMBERT,
Major General, United States Army,
The Adjutant General

DISTRIBUTION:

Active Army:

DCSPER (2)	Seventh USA (25)
ACSI (2)	EUSA (25)
DCSOPS (10)	Corps (15)
DCSLOG (2)	Div (10) except
ACSRC (2)	Armd Div (25)
CARROTC (2)	Bde (5)
CofF (2)	Regt/Gp/Bg (5)
COA (1)	Bn (5)
CRD (2)	Co/Btry (2)
CNGB (2)	USAWC (2)
TJAG (1)	USACGSC (1500)
TPMG (5)	TAGSUSA (200)
TAG (5)	USAARMS (250)
TIG (1)	USAES (360)
CofCh (1)	USAIS (80)
CINFO (1)	MFSS (516)
CMH (1)	USA Ord Sch (150)
USASA (1)	PMGS (75)
Tech Stf, DA (5)	USATSCH (150)
USCONARC (15)	MAAG (1)
OS Maj Comd (15)	Mil Msn (1)
OS Base Comd (5)	JBUSMC (1)
LOGCOMD (5)	JUSMAGG (1)
MDW (2)	JUSMMAT (1)

NG: State AG (3); Div (1) except Armd Div (4); Div Arty (1);
Regt/Gp/Bg (1); Bn (1); TOE: 17-62 (1)

USAR: Same as Active Army except allowance is one copy to each unit.

For explanation of abbreviations used, see AR 320-50.

3000017422



